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RURAL SCHOOL SURVEY *of* NEW YORK STATE

THE RURAL HIGH SCHOOL

By

EMERY N. FERRISS

PROFESSOR OF RURAL EDUCATION
CORNELL UNIVERSITY

Ithaca, New York

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FOREWORD

BULLETIN No. 19 for 1920, of the U. S. Bureau of Education, indicates that there were 13,951 public high schools in the United States in the academic year 1917–18. Slightly more than half of these schools had each an enrolment of fifty pupils or less and seventy-five percent enrolled each one hundred pupils or less. These figures serve as an index of the importance of the small high school in the program of secondary education in this country. These small schools are in the main located in small villages or in the open country, and this study of the rural high schools of New York State should reveal problems that are of general interest because of the frequency with which they are likely to be met. Dr. Ferriss' consideration of these questions should prove helpful to those who are concerned with the administrative and the instructional work of small high schools throughout the country.

In the organization of the survey the administrative phases of this study were placed under the general direction of Dr. C. H. Judd, while Dr. W. C. Bagley had a similar relation to the problems of instruction and teacher preparation.

This study was made and the results published with money furnished by the Commonwealth Fund.

GEO. A. WORKS,
Director.

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THE RURAL HIGH SCHOOL

PART I

ORGANIZATION, ADMINISTRATION, AND SUPERVISION

CHAPTER I

THE DISTRIBUTION OF RURAL HIGH SCHOOLS AND THEIR PUPIL POPULATION

THE data used as the basis of the study of the organization, administration, and supervision of the rural high schools were derived mainly from three sources: (1) statistics and reports of the State Department of Education; (2) the replies of 405 principals to a questionnaire sent to all rural high school principals of the State; and (3) visitation of over 75 rural high schools in all sections of the State. In the use of data on any item gained through the replies of principals only those schools were included for which there was a definite report on that particular item. The 405 principals reporting represented approximately 66 per cent of each type of rural high school in the State, classification being made on the basis of number of pupils enrolled in high school work.

Types and Distribution

According to Handbook 24 of the University of the State of New York for October, 1920, there were at that time 765 public high

schools[1] in the State. Of the 765 public high schools, 609 were rural high schools located in centers of 4500 population or less and doing from one to four years of accredited high school work. Of these rural high schools, 413 were fully accredited four year high schools; 110 were ranked as senior schools doing three years of accredited work, though a large percentage of these schools offered the fourth year; 34 were ranked as middle schools doing two years of accredited work; and 52 ranked as junior schools doing one year of accredited work. During the year two junior schools, Benson Mines and Sloan, and one middle school, Hyde Park, discontinued high school work. During the year, also, undoubtedly several schools were added to the accredited list for one or more years of high school work and some were advanced in rank. However, this number is not great enough to change materially the relative number and proportion of rural high schools.

In 1918, according to statistics of the Federal Bureau of Education, New York stood 27th among the states in the number of high school pupils enrolled for each 1000 of population, with 15.3 or 0.3 less than the average of 15.6 for the United States as a whole. With regard to the percentage of population (18 years old) graduating from four year high schools, New York stood 30th with 8.05, or 2.27 less than the average of 10.32 for the United States as a whole.

In this study the rural high schools are distributed in the following manner: first, as to the size of the center of population in which they are located; second, as to distribution by counties; third, as to distribution by district superintendents' districts; and fourth, as to number of high school pupils enrolled. Two hundred and forty-seven schools, according to the U. S. Census for 1920, are in rural communities or in unincorporated centers; 75 are in villages with a population of 500 or less; 107 are in villages with a population between 500 and 1000, making a total of 429 high schools, or over 70 per cent, in centers of 1000 or less. As to rank, these 429 schools stand as follows: 49 junior schools, 33 middle schools, 106 senior schools, and 241 four year high schools. (See Table 1.)

[1] The term "high school" is used throughout this report as applying to any school offering one or more years of secondary school work.

TABLE 1.—DISTRIBUTION OF RURAL HIGH SCHOOLS ON THE BASIS OF SIZE OF CENTER IN WHICH LOCATED AND RANK OF SCHOOL

Size of center	Junior schools	Middle schools	Senior schools	High schools	Total
Rural or unincorporated hamlets	40	24	82	101	247
Villages of 250 or under	..	1	4	3	8
250– 500	4	7	14	42	67
500– 750	5	1	4	53	63
750–1,000	..	..	2	42	44
1,000–1,250	..	..	1	35	36
1,250–1,500	..	..	..	24	24
1,500–1,750	2	..	..	24	26
1,750–2,000	..	..	..	13	13
2,000–2,250	1	1	..	11	13
2,250–2,500	..	..	..	11	11
2,500–2,750	..	..	1	16	17
2,750–3,000	..	..	..	6	6
3,000–3,250	..	..	2	7	9
3,250–3,500	..	..	..	6	6
3,500–3,750	..	..	..	4	4
3,750–4,000	..	..	..	6	6
4,000–4,250	..	..	..	5	5
4,250–4,500	..	..	..	2	2
Above 4,500, 1920 U. S. Census	..	..	..	2	2
Total	52	34	110	413	609

In the distribution by counties the rural high schools number per county from three in Fulton county to 27 each for St. Lawrence and Suffolk counties. By supervisory districts the distribution runs from none in seven supervisory districts to 13 high schools in the first supervisory district of Suffolk county. There is a discrepancy of 11 high schools between the report by counties and supervisory districts (this report giving 620 schools doing high school work) and the number given in the October, 1920, Directory of the University of the State of New York. This discrepancy is probably due to the fact that the district superintendents have reported some schools not recognized by the State Department as giving accredited high school work. For the detailed distribution by counties and supervisory districts see Table 2.

TABLE 2.—DISTRIBUTION OF RURAL HIGH SCHOOLS WITH RESPECT TO COUNTIES AND SUPERVISORY DISTRICTS (DISTRICT SUPERINTENDENTS' REPORT, 1920)

A. Distribution of Rural High Schools by Counties

Albany	4	Hamilton	3	Rockland	7
Allegany	16	Herkimer	7	St. Lawrence	27
Broome	5	Jefferson	23	Saratoga	8
Cattaraugus	19	Lewis	8	Schenectady	3
Cayuga	13	Livingston	12	Schoharie	6
Chautauqua	21	Madison	18	Schuyler	4
Chemung	6	Monroe	13	Seneca	4
Chenango	13	Montgomery	6	Steuben	18
Clinton	12	Nassau	13	Suffolk	27
Columbia	6	Niagara	6	Sullivan	11
Cortland	6	Oneida	23	Tioga	6
Delaware	13	Onondaga	21	Tompkins	7
Dutchess	12	Ontario	9	Ulster	5
Erie	19	Orange	15	Warren	6
Essex	14	Orleans	5	Washington	10
Franklin	9	Oswego	12	Wayne	13
Fulton	3	Otsego	20	Westchester	9
Genesee	8	Putnam	5	Wyoming	9
Greene	7	Rensselaer	5	Yates	3

B. Distribution of Rural High Schools in the 208 Supervisory Districts

Number of schools per district	1	2	3	4	5	6	7	8	9	10	11	12	13
Number of districts having each number of schools	7	31	44	61	35	18	7	1	1	2	..	..	..	1

The rural high schools are distributed as follows according to the number of high school pupils enrolled: 332 schools, or 54.5 per cent of all the rural high schools of the State, have an enrolment of less than 50; 180 schools or 29.5 per cent have an enrolment of 50–99; 65 schools or 10.7 percent have an enrolment of 100–149; and 32 schools or 5.2 per cent have an enrolment of 150 or over.

PERCENTAGE OF PUPILS COMING FROM ONE AND TWO TEACHER SCHOOLS

A study of the percentage of the high school pupils coming from one and two teacher elementary schools shows that the schools with enrolments of 1 to 49 (not including the schools of 1–49 pupils offering less than 4 years' high school work) and 50 to 99 are most typically rural from the standpoint of ratio of rural pupils enrolled to village pupils enrolled. These schools should be also most rural or sympathetic with rural conditions in regard to their village enrolment because of the rural interests of the small village. The four year high schools with a pupil enrolment under 50 also have

the largest percentage of pupils from other villages with no or less than four year high schools. In the schools of these two classes, on the basis of enrolment, one-third of the pupils are from rural communities. The schools with an enrolment above 100 have a smaller percentage of rural pupils, although in actual numbers the enrolment of rural pupils per school is at least equal to that of the smaller schools. The main problem of high school opportunities for the rural child of New York seems to be largely the problem of the high school with a pupil enrolment of 1 to 100, both because these schools are 84 per cent of all the rural high schools and because of the relative number of pupils attending from one and two teacher schools.

TABLE 3.—THE PERCENTAGE THAT PUPILS COMING FROM ONE- AND TWO-TEACHER ELEMENTARY SCHOOLS ARE OF THE TOTAL HIGH SCHOOL ENROLMENT IN THE HIGH SCHOOLS CLASSIFIED ACCORDING TO SIZE OF PUPIL ENROLMENT. (403 HIGH SCHOOLS)

Types of schools on basis of size of enrolment	Percentage that pupils from one- and two-teacher schools are of the total high school enrolment		Percentage that pupils from other villages are of total high school enrolment	
	Boys	Girls	Boys	Girls
1–49 (less than 4 years)	21.0	22.3	1.1	1.1
1–49	33.5	32.3	6.4	6.3
50–99	33.1	31.9	1.0	0.9
100–149	25.8	29.5	0.7	0.8
150	24.1	24.6	0.8	0.6
All rural high schools	29.2	29.6	0.8	0.8

DISTRIBUTION OF PUPILS BY SCHOOL YEAR AND AGE

The distribution of the pupils in the 609 rural high schools with reference to age and year of high school work shows that the range in ages for any year of the course is wide. The relatively large percentage of pupils at or above the age of sixteen in the first two years is very noticeable. In comparison with all the high schools of Connecticut the percentage of pupils in the high school year to which they would normally belong is low. (Table 4.)

TABLE 4.—HIGH SCHOOL AGE-GRADE TABLE OF 609 RURAL HIGH SCHOOLS BASED ON AGE AT THE BEGINNING OF THE SCHOOL YEAR 1919–20

(a)

	Age..	11	12	13	14	15	16	17	18	19	20	21 or over	Total
9th grade	boys	36	223	1,043	1,817	1,693	936	300	64	18	8	1	6,139
	girls	38	415	1,342	2,529	2,024	1,018	381	93	21	4	6	7,871
10th grade	boys	3	28	215	686	1,121	986	495	129	34	17	2	3,716
	girls	5	30	272	1,042	1,666	1,374	638	234	53	27	5	5,346
11th grade	boys	1	1	16	107	437	832	572	249	73	27	14	2,329
	girls	..	1	35	211	788	1,250	880	328	99	31	19	3,642
12th grade	boys	..	..	3	18	111	373	509	344	141	40	28	1,567
	girls	..	..	7	27	185	654	937	607	254	63	22	2,756
13th grade[1]	boys	..	..	..	7	14	29	35	51	12	8	2	158
	girls	..	..	..	3	7	37	53	44	39	20	20	223
Total		83	698	2,933	6,447	8,046	7,489	4,800	2,143	744	245	119	33,747

(b) Percentage in each year of each age, boys and girls combined

	11	12	13	14	15	16	17	18	19	20	21 or over	[2]
9th grade	.528	4.55	17.02	31.02	26.53	13.95	4.86	1.12	.278	.085	.050	41.51
10th grade	.088	.64	5.37	19.06	30.75	26.04	12.50	4.00	.960	.485	.077	26.85
11th grade	..	.033	.854	5.32	20.51	34.87	24.32	9.66	2.88	.971	.552	17.69
12th grade	..	..	.231	1.04	6.85	23.76	33.45	22.00	9.14	2.38	1.15	12.81
13th grade	..	..	..	2.62	5.51	17.32	23.10	24.93	13.38	7.35	5.77	1.13
Total percent	245	2.07	8.69	19.10	23.84	22.16	14.25	6.34	2.20	.717	.352	..

(c) Connecticut (1918, November–December)—Percentage of each age, boys and girls combined. All high schools

	11	12	13	14	15	16	17	18	19	20	21	Over 21
9th grade	.355	5.37	28.13	39.29	19.80	5.93	.899	.155	.044	..	..	..
10th grade	.016	.36	5.44	29.73	37.22	20.12	5.78	1.11	.128	.064	.016	.016
11th grade	..	.022	.457	5.74	28.10	39.10	18.90	6.06	1.30	.032	.022	.022
12th grade	..	..	.030	.32	5.85	27.23	39.17	21.38	5.23	6.44	.015	.030
Total percent	.143	2.20	12.1	24.6	24.0	19.2	11.3	4.7	1.1	.125	.026	.01

[1] A large proportion of the pupils in this year are in school to make up one or more deficiencies in Regents requirements due to failures the preceding year. Usually they carry one or more additional subjects.

[2] Number in each year on the basis of 100 as the total enrolment.

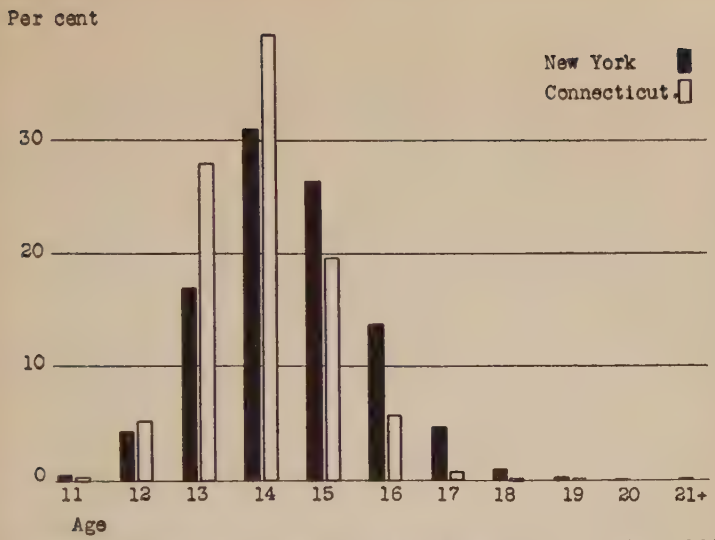

Diagram 1.—Comparison of ages of 9th grade pupils in New York rural high schools and all Connecticut high schools

A comparison of New York rural high schools with the rural high schools of the United States as a whole and with the high schools of certain other states for which data are available shows that the percentage of pupils reaching the third and fourth years is comparatively low. It is considerably lower than for all the rural high schools of the United States. According to the report of the Federal Bureau of Education, for 1917–18 New York stood 27th on the basis of number of high school pupils enrolled per 1000 population, but dropped to 30th place on the basis of the number of graduates per 1000 (18 years old). In the New York rural high schools the percentage of pupils in the third and fourth years is very similar to the percentage in the last two years for all the schools of New Jersey and is materially less than that of New Hampshire. Compared with the schools of Connecticut with a pupil enrolment under 100, or with the schools of Massachusetts with a pupil enrolment under 200, the New York rural high schools show in both instances a smaller percentage of pupils retained to the third and fourth years. A comparison with all New York high schools indicates a greater holding power of the rural high school over the city high schools of the State. (Tables 5 and 6.)

TABLE 5.—A STUDY OF ENROLMENT BY YEARS OF 403 RURAL HIGH SCHOOLS OF NEW YORK: (*a*) SHOWING THE NUMBER, BOYS AND GIRLS SEPARATELY, ENROLLED IN EACH YEAR; (*b*) THE COMPARATIVE PERCENTAGES FOR EACH YEAR, USING THE FIRST YEAR AS THE 100 PERCENT BASIS; (*c*) THE DISTRIBUTION IN EACH YEAR ON THE BASIS OF 100 PUPILS ENROLLED IN THE HIGH SCHOOL

Size of school	First year		Second year		Third year		Fourth year		Fifth year	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
(*a*)										
1–49 pupils, less than 4 year schools	269	354	97	168	25	51	3	8	1	..
1–49 pupils	994	1,222	537	816	358	605	238	445	14	23
50–99 pupils	1,451	1,758	830	1,145	543	884	398	681	40	59
100–149 pupils	1,011	1,266	618	832	400	554	291	464	34	29
150 pupils and over	938	1,147	547	782	343	478	219	385	14	32
Total	4,663	5,747	2,629	3,743	1,669	2,572	1,149	1,983	103	143
(*b*)[1]										
1–49 pupils	100	100	54.0	66.7	36.0	49.5	23.9	33.1	.014	.018
50–99 pupils	100	100	57.2	65.1	37.4	50.2	27.4	38.7	.027	.033
100–149 pupils	100	100	61.1	65.7	39.5	43.7	28.7	36.6	.033	.023
150 pupils and over	100	100	58.3	68.1	36.5	41.6	23.3	33.5	.014	.028
Total	100	100	56.4	64.8	35.8	44.8	24.6	34.5	.022	.024
(*c*)[1]										
1–49 pupils	46.43	39.20	25.08	26.20	16.72	19.40	11.12	14.20	.65	.73
50–99 pupils	44.48	38.80	25.44	25.29	16.65	19.52	12.20	15.04	1.23	1.25
100–149 pupils	42.95	40.26	26.25	26.46	17.00	17.62	12.36	14.75	1.44	.92
150 pupils and over	45.50	40.62	26.50	27.70	16.50	16.92	10.60	13.63	.67	1.12
Total	45.60	40.50	25.70	26.40	16.30	18.13	11.20	14.70	1.00	1.00
Boys and girls combined	42.7		26.1		17.4		12.8		1.00	

[1] The data for schools doing less than four years of work are used only in the totals of (*b*) and (*c*).

TABLE 6.—A STUDY OF ENROLMENT BY YEARS OF THE PUPILS IN THE RURAL HIGH SCHOOLS AS COMPARED WITH THE PUPIL ENROLMENT IN CERTAIN EASTERN STATES AND WITH THE UNITED STATES AS A WHOLE. THE DISTRIBUTION IN EACH YEAR IS SHOWN ON THE BASIS OF A TOTAL HIGH SCHOOL ENROLMENT OF 100 PUPILS

Type of school	1st year	2d year	3d year	4th year	5th year
609 rural high schools, New York (1919–20)	41.51	26.85	17.69	12.81	1.12
345 (four-year) rural high schools, New York (1920–21)	41.8	26.1	17.8	13.3	1.00
All New York high schools (1916–17)	43.8	26.6	17.2	11.3	1.20
54 rural high schools offering vocational courses (1919–20)	40.25	27.75	18.41	13.59	..
Connecticut high schools with enrolment under 100 pupils (1920–21)	40.2	26.4	17.4	15.5	0.50
Massachusetts high schools with enrolment under 200 pupils (1916–17)	36.5	26.8	20.8	15.9	..
New Jersey high schools (1917–18)	42.6	26.4	17.3	13.5	..
New Hampshire high schools (1915–16)	40.0	24.8	19.1	16.0	..
Rural high schools of United States (1917–18)	38.9	27.1	19.6	14.4	..

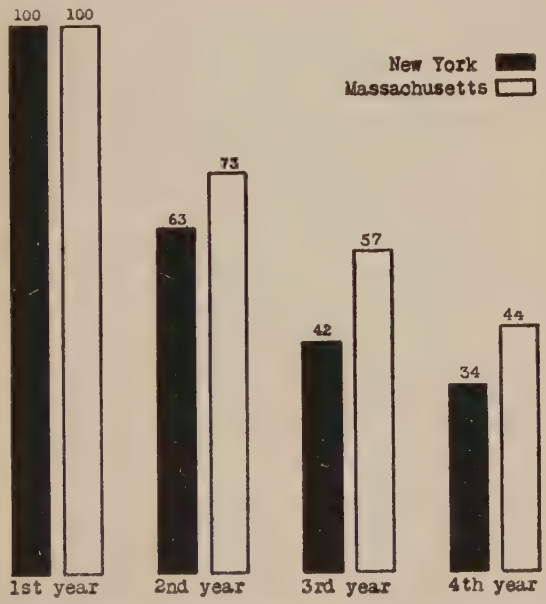

Diagram 2.—Number of pupils in the different years of high school in proportion to each 100 in the first year, for New York four-year rural high schools and Massachusetts high schools with an enrolment under 200

The number of pupils graduating for each 100 entering high school is considerably higher in the rural high school than in the city high schools of the State and slightly lower than in the case of high schools situated in villages having superintendents.

TABLE 7.—THE NUMBER OF GRADUATES FOR EACH 100 PUPILS ENTERING HIGH SCHOOL[1]

Type of school	First year pupils, 1916	Graduates, 1920	Continuing education, 1920
Cities and villages having superintendent	100	25.82	14.27
Rural high schools	100	31.94	18.89
Rural high and senior schools	100	30.99	18.25
Villages having superintendents	100	32.30	14.42

The percentage of pupils over 18 years of age in each year of high school work is high. The New York distribution of pupils for rural high schools shows a pulling both toward underage and toward overage, particularly the latter. A large factor operating to produce both of these characteristics is probably the final examination as the sole basis of promotion, and the rigid, inflexible type of curriculum in the small high schools.

The study of 225,865 employed boys of the ages 16, 17, and 18 years made by the New York State Military Training Commission bears out the facts given above. It shows that while the employed boys of the ages given, from places under 5000 population and from rural districts, tended in greater percentages than employed boys from larger centers to remain in school one year beyond the legal age, and in equal percentages for two and three years, the grade attained in school, particularly in the case of farm boys, was materially less than for the boys in the larger centers. The following statistics, taken from the study[2] by Howard G. Burdge, the Director of the work of the Commission, give the facts in detail:

[1] Statistics from Assistant Commissioner for Secondary Education.

[2] Burdge, Howard G.: Our Boys, pp. 64, 88, 102.

1. Persistence in School (from Burdge)

Groups	Left illegally	Left on reaching legal age	Remained beyond legal age		
			One year	Two years	Three years
Greater New York	7.0	28.6	39.9	20.5	4.0
Cities over 25,000	4.8	28.9	37.1	22.5	6.7
Cities under 25,000	8.7	23.5	36.0	24.0	7.8
Villages over 5,000	5.0	23.6	36.8	26.9	7.7
Places under 5,000	4.3	23.8	38.0	26.0	7.9
Employed farm boys	3.4	26.4	40.0	25.1	5.1

2. Last Grade Completed, Percentage Completing Each Grade (from Burdge)

	4th grade or under	5th grade	6th grade	7th grade	8th grade	High school			
						I	II	III	IV
Greater New York	100	94.3	91.8	84.4	61.5	18.0	9.2	3.3	1.0
Cities over 25,000	100	96.6	92.6	77.4	55.6	24.2	11.2	4.0	1.3
Cities under 25,000	100	95.1	89.2	71.7	49.8	23.7	10.3	3.4	1.2
Villages over 5,000	100	94.8	88.6	71.9	49.7	22.2	10.0	3.6	1.2
Places under 5,000	100	95.8	89.4	71.8	47.9	21.0	10.1	3.9	2.0
Employed farm boys	100	96.8	89.3	71.0	41.5	12.4	5.6	1.9	0.7

The same study also shows that the rate of progress in school in the case of employed boys from places under 5000 and from rural communities was less than for the larger centers. In conclusion the study of employed boys of the State supports the facts shown by the age-distribution of pupils in the rural high schools as to the comparatively high percentage of retardation and elimination. The following table gives the percentage of a grade made each year while in school:

3. Average Rate of Progress per Grade per Year (from Burdge)

Greater New York	92.2 percent
Cities over 25,000	90.1 "
Cities under 25,000	86.9 "
Villages over 5,000	85.1 "
Places under 5,000	84.9 "
Employed farm boys	82.8 "

Ratio of Boys to Girls in each School Year

In the matter of the ratio of boys to girls in each year of the high school, New York rural high schools follow closely the average for rural and village high schools for the whole United States, as shown by the comparison with statistics compiled from the Report of the Bureau of Education on High Schools for 1917–18. If, however, the ratio is studied comparatively with respect to the New York rural high schools of the different classes, classification being made on the basis of number of pupils enrolled, the condition shown is not so good. The ratio of boys to girls is very much lower in the smaller schools, indicating that the holding power with respect to boys is less in the smaller schools. It gradually improves as the schools increase in size, but is best in the case of 54 rural high schools offering vocational courses. The study of 403 rural high schools shown in Table 8 clearly indicates this condition.

Table 8.—A Study of the Relative Percentage of Boys and Girls in the Different Years of the Rural High School (403 Schools)

Type of school	First year		Second year		Third year		Fourth year	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
1–49 pupils, less than 4 year schools	43.2	56.8	36.6	63.4	32.9	67.1	27.3	72.7
1–49 pupils	44.9	55.1	39.7	60.3	37.2	62.8	34.8	65.2
50–99 pupils	45.2	54.8	42.0	58.0	38.0	62.0	36.9	63.1
100–149 pupils	44.4	55.6	42.6	57.3	41.9	58.1	38.5	61.5
150 pupils and over	45.0	55.0	41.1	58.9	41.8	58.2	36.3	63.7
For all the 403 high schools	44.8	55.2	41.2	58.8	39.4	60.6	36.7	63.3
54 New York rural high schools offering vocational courses	47.0	53.0	42.0	58.0	42.6	57.4	37.8	62.2
Village and rural high schools of U. S. (1917–18)	43.8	56.2	41.3	58.7	39.4	60.6	36.8	63.2

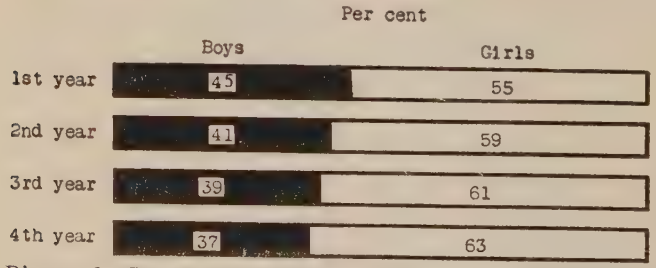

Diagram 3.—Percent of boys and girls in different years of the rural high schools

CHAPTER II

THE ORGANIZATION OF THE RURAL HIGH SCHOOL

The Teaching Staff

THE data with regard to the organization of the teaching staff of the New York rural high school as to number of teachers and percentage of men and women indicate that over one-half of the schools have a teaching staff of three instructors or less. In all New York rural high schools the relative percentage of men is exceptionally low as compared with the average either for village and rural high schools for the United States as a whole or for all high schools in the United States in 1918, or for 25 city high schools of New York in 1918 as they appeared in alphabetical order.

Table 9.—The Teaching Staff as to Number per School and Sex (405 Schools)

Types of schools	Average number of teachers per school	Percentage that men are of the total number of teachers	Percentage that women are of the total number of teachers	Total number of schools reporting
1–49, less than 4 years	2.2	24.15	75.85	60
1–49	3.0	31.57	68.43	162
50–99	4.9	22.62	77.38	112
100–149	6.8	24.06	75.94	49
150	10.2	21.33	78.67	22
Average for the 405 schools	4.3	26.71	73.29	405
25 city high schools in New York State	..	33.9	66.1	..
Village and rural high schools for U. S., 1917–18	..	33.66	66.34	..
All high schools, U. S., 1917–18	..	34.55	65.45	..

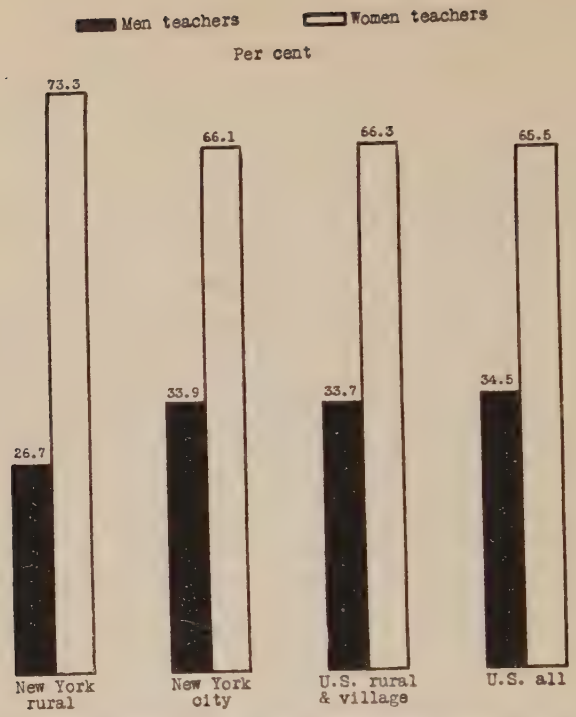

Diagram 4.—Proportion of men and women teachers in New York rural high schools compared with 25 city high schools of New York State and with high schools of the United States

The Organization of the School Day

With regard to the organization of the New York rural high school, a detailed study of over 400 schools shows a wide diversity. There are, however, rather definite modes around which the schools group themselves in respect to the various phases of school organization. The most common plan as to the daily program of classes is that of the eight-period day. In the larger schools, the seven-period day is most frequently found, with a large number following the eight-period organization. The schools with a high school enrolment under 100, or 84 percent of all the rural high schools of the State, are prevailingly organized on the basis of eight periods a

day, but with a strong leaning toward nine or more periods. Five of the smaller schools reported a ten-period day and one school reported 12 periods in the daily program.

The most common recitation period is forty minutes in length, with 71 schools using the 45 minute period. Twenty-three of the

TABLE 10.—A STUDY OF THE ORGANIZATION OF 402 RURAL HIGH SCHOOLS FROM THE STANDPOINT OF NUMBER OF RECITATION PERIODS PER DAY AND THE LENGTH OF THE RECITATION PERIOD

Number of periods in school day	Number of high schools grouped according to pupil enrolment					
	1–49 less than 4 years	1–49 full four years	50–99	100–149	150 and over	Total
5	2	..	..	..	..	2
6	2	..	1	1	1	5
7	17	29	42	26	13	127
8	29	123	65	20	8	245
9	6	6	5	..	..	17
10	1	4	..	..	..	5
11	..	..	..	..	..	..
12	1	..	..	..	..	1
Total.....	58	162	113	47	22	402
Length of recitation periods	1–49 less than 4 years	1–49 full four years	50–99	100–149	150 and over	Total
30	2	2	..	..	..	4
35	12	7	2	1	..	22
40	27	111	78	24	9	249
45	9	15	22	17	8	71
30+40	..	4	1	..	..	5
30+45	..	..	..	1	..	1
35+40	1	10	2	2	1	16
35+45	5	..	2	2	..	9
40+55	2	13	6	..	2	23
60	..	..	..	..	2	2
Total.....	58	162	113	47	22	402

smaller schools reporting and three of the larger schools have periods of thirty-five minutes or less. A considerable number of schools have periods of differing lengths, as combinations of 35 and 40 or of 35 and 45 minutes. Only two schools reported an organization on the 60 minute period basis. (See Table 10.)

All data on the daily program of the rural high school, both from reports from principals and from visitation of over 75 rural high schools in all sections of the State, point definitely to the conclusion that there is a strong tendency to divide the high school day into an excessively large number of periods. They also point to a fact related to the former, that many high schools have periods too short for efficient high school work. With the exception of an almost negligible number of the larger schools, the length of the recitation periods is too short to permit of any class-room study under supervision or for the adequate development of a genuine lesson unit. The length of periods and the number in a day when combined with the facts as to teaching load of the principal (Table 11) and the teaching load of the high school teacher (Table 19) indicate clearly a need of reorganization in the daily program of the rural high school. It would seem that it might be highly advisable to decrease the number of recitation periods a week in some subjects if that were the only means of reducing the number of periods in a day and thus increasing the length of the recitation period. Further reductions might very well be made through alternation of subjects. (See p. 46.)

The Work of the Principal

The principal of the rural high school in New York is also the principal of the elementary grades of the school. He is nominally at least responsible for the organization, administration, and supervision of instruction of the elementary grades, as well as of the high school. In the smaller high schools of two or three teachers (one being the principal) in the secondary or academic grades, there are from three to five teachers in the elementary grades. This organization makes the high school principal's work complex and difficult. In the smaller schools he has, in addition to his

principalship work, a large teaching load. In other words, the daily teaching load of the rural high school principal in New York is as heavy as that set up as a standard for high school instructors in the North Central Association of Colleges and Secondary Schools. When this condition is considered in the light of the fact that the principal of the rural high school has in his charge the organization and oversight of the instruction in the elementary grades, as well as in the high school proper, it becomes more serious. If the principal is to have time to perform the duties that should devolve upon him; if he is to function adequately as an administrative officer and as a supervisor, he must, it would seem, have relief from so much class-room teaching. Otherwise only the principal of exceptional ability and strength will develop into the counselor of his pupils, the leader of his teachers or of his board and community in educational matters, that the rural high school principal must be if efficient high schools are to be found in rural communities.

Table 11 gives in detail the facts as to the teaching load of the principal of the rural high school as reported by 385 New York rural high school principals. In the schools doing less than four years of high school work the median teaching load a day for principals is seven periods, while in 12 out of 54 schools of this class reporting the principal was teaching nine or more periods a day during the school year of 1920–21. In the four year high schools with an enrolment under 50, the median principal taught six periods a day, the range for the middle 50 percent being between five and seven periods and with 63 principals teaching seven periods a day or more. The median for schools with a high school enrolment of 50 and above is 3.5 periods a day, while for all schools reporting the median is five periods a day. For 385 schools, 96 principals, or over 24 percent, were teaching seven periods a day or more. (See Table 11.)

The median principal for all schools with a high school enrolment under 50 gave between 31 and 40 minutes a day to supervision of instruction. Forty principals in these same schools gave no time to supervision. The median principal in schools with an enrolment in the high school of 50 and above gave 61–70 minutes

TABLE 11.—THE TEACHING LOAD OF THE PRINCIPAL

No. of minutes per day	Schools less than 4 years 1–49 (1)	Schools full 4 years 1–49 (2)	Schools 50–99 (3)	Schools 100–149 (4)	Schools 150– (5)	Total of schools (1) and (2)	Total of schools (3), (4) and (5)	Grand total all schools
0	1	1	3	5	4	2	12	14
20	..	..	..	..	1	..	1	1
40	1	..	6	11	4	1	21	22
60	..	1	3	2	3	1	8	9
80	1	1	10	4	2	2	16	18
100	..	2	3	5	2	2	10	12
120	..	..	11	1	2	..	14	14
140	..	7	6	7	1	7	14	21
160	1	11	19	3	1	12	23	35
180	1	16	10	5	1	17	16	33
200	7	13	14	1	..	20	15	35
220	4	9	5	..	..	13	5	18
240	9	23	10	..	..	32	10	42
260	2	11	2	..	..	13	2	15
280	12	29	4	..	..	41	4	45
300	3	9	1	..	..	12	1	13
320	9	16	..	..	..	25	..	25
340	2	3	1	..	..	5	1	6
360	1	6	..	..	..	7	..	7
No. of schools	54	158	108	44	21	212	173	385
Median	270	240	160	90	60	240	140	200
First quartile....	220	200	120	40	40	200	80	140
Third quartile....	300	280	200	140	100	280	180	260
Number of periods taught daily..	7	6	4	2	1.5	6	3.5	5

a day to supervision. The median principal for all schools of the 380 reporting on this item gave 31 to 40 minutes a day to supervision of instruction. For all schools reporting, 93 principals, or over 24 percent, gave less than 20 minutes a day to supervision. (See Table 12.)

TABLE 12.—THE TOTAL AMOUNT OF TIME PER DAY DEVOTED BY THE HIGH SCHOOL PRINCIPAL TO SUPERVISION OF INSTRUCTION

Time in minutes	Schools less than 4 years 1–49 (1)	Schools full 4 years 1–49 (2)	Schools 50–99 (3)	Schools 100–149 (4)	Schools 150– (5)	Total of schools (1) and (2)	Total of schools (3), (4) and (5)	Grand total all schools
0	10	30	1	2	1	40	4	44
1–10	7	8	3	..	..	15	3	18
11–20	9	13	6	3	..	22	9	31
21–30	3	19	11	1	..	22	12	34
31–40	13	39	25	4	3	52	32	84
41–50	5	7	6	1	1	12	8	20
51–60	..	13	9	6	..	13	15	28
61–70	..	4	2	..	1	4	3	7
71–80	1	9	12	4	1	10	17	27
81–90	1	4	8	3	1	5	12	17
91–100	1	2	4	2	4	3	10	13
101–110	..	1	..	1	1	1	2	3
111–120	..	4	5	1	1	4	7	11
121–130	2	1	..	1	..	3	1	4
131–140	..	3	1	7	1	3	9	12
141–150	1	..	1	2	..	1	3	4
151–160	..	..	6	2	3	..	11	11
161–170	..	..	..	..	..	..	..	..
171–180	..	..	3	4	..	..	7	7
181–190	..	..	..	..	..	..	..	..
191–200	..	2	1	..	..	2	1	3
201–240	..	..	..	..	2	..	2	2
No. of schools	53	159	104	44	20	212	168	380
Median	21–30	31–40	50	81–90	91–100	31–40	61–70	31–40
First quartile....	1–10	1–10	31–40	41–50	61–70	1–10	31–40	21–30
Third quartile....	31–40	51–60	81–90	131–140	151–160	41–50	101–110	71–80

SUPERVISION OF INSTRUCTION.—The median principal in schools with a high school enrolment under 50 gave one to 10 minutes a day to supervision of high school instruction, and 78 principals in schools of this class gave no time to high school class-room supervision. The same principal gave from 11 to 20 minutes a day to supervision of instruction in the elementary grades, and 43 prin-

cipals in schools of this class did no supervising of instruction of the elementary grades. In the schools with a high school enrolment of 50 and over, the median principal gave 11 to 20 minutes to supervision of instruction in the high school and 31 to 40 minutes to the elementary grades. In these schools 11 principals gave no time to supervision in the high school and four gave no time to supervision in the grades. For all schools reporting, the median principal gave 11 to 20 minutes a day to supervision of instruction in the high school and 21 to 30 minutes to the elementary grades. One hundred seventy-one principals, or over 44 percent, gave less than 10 minutes a day to high school supervision, and 91 principals, or over 24 percent, less than 10 minutes a day to supervision in the grades. (See Tables 13 and 14.)

TABLE 13.—TOTAL AMOUNT OF TIME PER DAY DEVOTED BY THE HIGH SCHOOL PRINCIPAL TO SUPERVISION OF HIGH SCHOOL INSTRUCTION

No. of minutes	Schools less than 4 years 1–49 (1)	Schools full 4 years 1–49 (2)	Schools 50–99 (3)	Schools 100–149 (4)	Schools 150– (5)	Total of schools (1) and (2)	Total of schools (3), (4) and (5)	Grand total of all schools
0	25	53	8	2	1	78	11	.89
1–10	14	35	26	6	1	49	33	82
11–20	9	36	27	10	5	45	42	87
21–30	1	10	7	3	1	11	11	22
31–40	3	13	18	12	3	16	33	49
41–50	..	3	6	3	1	3	10	13
51–60	3	4	7	3	2	7	12	19
61–70	..	1	..	..	..	1	..	1
71–80	..	1	3	3	4	1	10	11
81–90	..	1	..	1	1	1	2	3
91–100	1	..	1	1	1	1	3	4
101–110	..	..	..	..	..	..	..	..
111–120	..	..	1	..	..	..	1	1
No. of schools	56	157	104	44	20	213	168	381
Median	1–10	1–10	11–20	31–40	31–40	1–10	11–20	11–20
First quartile....	..	..	1–10	11–20	11–20	..	1–10	1–10
Third quartile....	11–20	11–20	31–40	40	71–80	11–20	31–40	31–40

TABLE 14.—TOTAL AMOUNT OF TIME PER DAY DEVOTED BY THE HIGH SCHOOL PRINCIPAL TO SUPERVISION OF INSTRUCTION IN THE ELEMENTARY GRADES

No. of minutes	Schools less than 4 years 1–49 (1)	Schools full 4 years 1–49 (2)	Schools 50–99 (3)	Schools 100–149 (4)	Schools 150– (5)	Total of schools (1) and (2)	Total of schools (3), (4) and (5)	Grand total of all schools
0	10	33	1	1	2	43	4	47
1–10	11	20	10	3	..	31	13	44
11–20	12	35	25	4	3	47	32	79
21–30	5	22	15	3	1	27	19	46
31–40	9	30	15	15	..	39	30	69
41–50	1	3	10	5	3	4	18	22
51–60	..	4	11	3	2	4	16	20
61–70	1	4	1	1	1	5	3	8
71–80	..	3	6	4	2	3	12	15
81–90	1	2	1	1	..	3	2	5
91–100	..	..	2	1	1	..	4	4
101–110	..	..	..	..	..	..	..	..
111–120	..	1	4	1	1	1	6	7
121–130	1	..	..	..	..	1	..	1
131–140	..	..	..	..	..	..	..	..
141–150	..	..	1	..	..	..	1	1
151–160	..	..	1	..	1	..	2	2
161–170	..	..	..	..	..	..	..	..
171–180	..	..	..	..	1	..	1	1
No. of schools	51	157	103	42	18	208	163	371
Median	11–20	11–20	31–40	31–40	50	11–20	31–40	21–30
First quartile....	1–10	1–10	11–20	11–20	11–20	1–10	11–20	11–20
Third quartile....	31–40	31–40	51–60	71–80	71–80	31–40	51–60	31–40

TIME GIVEN TO OFFICE WORK.—The median amount of time given to office work, including clerical work, conferences with teachers and counseling pupils, was for schools with a high school enrolment of less than 50 pupils, 31–40 minutes a day and for the larger schools 71–80 minutes a day. For the smaller schools this is not a true index of the time taken up by clerical work in the office, as many principals reported that this was the time available for consultation with pupils and teachers and did not include the

time given to clerical work which was done after school, evenings, and Saturdays. (For details see Table 15.)

TABLE 15.—TOTAL AMOUNT OF TIME PER DAY DEVOTED BY THE HIGH SCHOOL PRINCIPAL TO OFFICE WORK

No. of minutes	Schools less than 4 years 1–49 (1)	Schools full 4 years 1–49 (2)	Schools 50–99 (3)	Schools 100–149 (4)	Schools 150 (5)	Total of schools (1) and (2)	Total of schools (3), (4) and (5)	Grand total of all schools
0	5	15	..	1	..	20	1	21
1–10	7	7	2	2	..	14	4	18
11–20	9	17	6	2	1	26	9	35
21–30	5	21	5	1	..	26	6	32
31–40	7	22	22	5	3	29	30	59
41–50	..	9	7	4	..	9	11	20
51–60	3	16	9	3	1	19	13	32
61–70	1	4	2	1	..	5	3	8
71–80	6	13	14	6	3	19	23	42
81–90	..	2	3	1	2	2	6	8
91–100	1	9	5	1	2	10	8	18
101–110	..	..	..	2	..	..	2	2
111–120	..	5	7	1	1	5	9	14
121–130	..	..	3	2	..	..	5	5
131–140	..	..	2	1	..	..	3	3
141–150	..	1	2	..	1	1	3	4
151–160	1	1	1	..	1	2	2	4
161–170	..	..	..	..	..	..	..	..
171–180	..	..	2	3	..	..	5	5
181–190	..	..	..	..	..	..	..	..
191–200	..	1	2	3	3	1	8	9
231–240	..	..	4	2	..	..	6	6
291–300	..	..	2	5	1	..	8	8
No. of schools	45	143	100	46	19	188	165	353
Median	21–30	31–40	51–60	71–80	81–90	31–40	71–80	41–50
First quartile....	1–10	11–20	31–40	41–50	51–60	11–20	31–40	21–30
Third quartile....	51–60	51–60	110	171–180	151–160	51–60	111–120	81–90

CLERICAL ASSISTANCE.—One of the perplexing problems of the principal of the rural high school as forced upon the attention of the

survey field workers in their direct contact with the high school principal at work and as brought out in replies of 398 principals is the lack of clerical help. A great deal of the principal's time and energy is given over to the office work that should be done by a clerk. Principals reported that they spent Saturdays and evenings in making out and filing records and reports. Such work performed at the time it is cannot fail to operate against the efficiency of the principal's work as teacher and director of the school. It also means that insufficient records are kept in the majority of the rural high schools.

In detail the facts reported by 398 principals show that 308, or over 77 percent, of them had no clerical assistance. Over 87 percent of the principals had either no clerical assistance or only the voluntary, unpaid assistance of high school teachers. Six principals reported clerical assistance from pupils, fifteen principals got clerical assistance from teachers who received extra pay for this work, and 31 principals had paid clerks for either all or part time. The following table gives the facts as reported by the 398 principals (Table 16):

TABLE 16.—THE CLERICAL ASSISTANCE GIVEN THE PRINCIPAL

Amount of clerical help	Types of schools					
	1–49 less than four years	1–49	50–99	100–149	150–	Total
None	54	149	74	27	4	308
Pupils	1	1	2	1	1	6
Teachers	3	7	25	11	7	53
Paid clerks	2	5	4	10	10	31
Full time	..	2	2	3	2	9
Part time	2	3	2	7	8	22
Teachers paid extra for clerical work[1]	2	2	5	4	2	15
	60	162	105	49	22	

[1] Also included in data under teachers.

Direction of Pupil Activities.—The amount of time given each day to direction and supervision of pupil activities is remarkably uniform for all principals reporting on this phase of their work. The median amount of time a day given to such activities was 11 to 20 minutes, while 76 principals, 57 of them from schools with a high school enrolment under 50, reported no time given to pupil activities. This fact correlates closely with the facts shown by Table 28, which shows that the rural high schools of New York give comparatively little attention and emphasis to extra-class-room activities as a part of high school education. (See Table 17.)

Table 17.—Total Amount of Time per School Day Devoted by the High School Principal to Pupil Activities

No. of minutes	Schools less than 4 years 1–49 (1)	Schools full 4 years 1–49 (2)	Schools 50–99 (3)	Schools 100–149 (4)	Schools 150– (5)	Total of schools (1) and (2)	Total of schools (3), (4), (5)	Grand total of all schools
0	13	44	10	7	2	57	19	76
1–10	13	18	20	8	5	31	33	64
11–20	5	29	23	13	4	34	40	74
21–30	7	15	18	1	1	22	20	42
31–40	2	19	15	9	5	21	29	50
41–50	2	2	5	1	1	4	7	11
51–60	1	9	2	1	..	10	3	13
61–70	..	1	1	..	..	1	1	2
71–80	..	2	3	..	..	2	3	5
81–90	..	..	..	..	..	..	..	..
91–100	..	..	..	2	..	..	2	2
101–110	..	..	1	..	..	..	1	1
111–120	1	1	1	1	..	2	2	4
121–130	..	..	..	1	..	..	1	1
No. of schools	44	140	99	44	18	184	161	345
Median	1–10	11–20	11–20	11–20	11–20	11–20	11–20	11–20
First quartile....	..	..	1–10	1–10	1–10	..	1–10	1–10
Third quartile....	21–30	21–30	31–40	31–40	31–40	21–30	31–40	31–40

Time Devoted to Non-Pupil Activities.—The amount of time devoted to non-pupil activities related to the educational interests of the school was reported definitely by only 298 principals. The median amount of time reported by all schools was 21 to 30 min-

Table 18.—Total Amount of Time per Day Devoted by High School Principal to Non-Pupil Outside Activities. (Data from 298 Schools Reporting on Item)

No. of minutes	Schools less than 4 years 1–49 (1)	Schools full 4 years 1–49 (2)	Schools 50–99 (3)	Schools 100–149 (4)	Schools 150– (5)	Total schools (1) and (2)	Total schools (3), (4) and (5)	Grand total of all schools
0	3	21	14	2	..	24	16	40
1–10	4	9	6	2	1	13	9	22
11–20	5	17	13	6	3	22	22	44
21–30	9	19	15	6	2	28	23	51
31–40	6	9	12	5	2	15	19	34
41–50	..	6	2	2	1	6	5	11
51–60	6	18	8	5	2	24	15	39
61–70	..	1	..	2	..	1	2	3
71–80	..	4	4	4	1	4	9	13
81–90	..	2	1	..	1	2	2	4
91–100	..	9	2	1	2	9	5	14
101–110	..	..	..	..	..	..	..	..
111–120	1	3	2	..	..	4	2	6
121–130	1	..	..	1	..	1	1	2
131–140	..	1	..	1	..	1	1	2
141–150	..	1	1	..	..	1	1	2
151–160	1	..	..	..	..	1	..	1
161–180	..	1	2	..	1	1	3	4
181–200	..	2	3	..	1	2	4	6
No. of schools	36	123	85	37	17	159	139	298
Median	21–30	21–30	21–30	31–40	41–50	21–30	21–30	21–30
First quartile....	11–20	11–20	11–20	11–20	21–30	11–20	11–20	11–20
Third quartile....	31–40	51–60	51–60	51–60	81–90	51–60	51–60	51–60

Note.—Many of the principals reported that they did not give a definite reply to this item because they found it almost impossible to give an accurate estimate of the time. The majority of the principals of the smaller schools reported that all such time was given outside the regular school day.

TABLE 19.—TOTAL DISTRIBUTION OF THE PRINCIPAL'S TIME DURING THE SCHOOL DAY

Time in minutes	Teaching load of high school principals No. of principals	Total time devoted to supervision	Supervision of high school instruction	Supervision of grades	Office	Pupil activities	Outside activities
0	14	44	89	47	21	76	40
1–10	..	18	82	44	18	64	22
11–20	1	31	87	79	35	74	44
21–30	..	34	22	46	32	42	51
31–40	22	84	49	69	59	50	34
41–50	..	20	13	22	20	11	11
51–60	9	28	19	20	32	13	39
61–70	..	7	1	8	8	2	3
71–80	18	27	11	15	42	5	13
81–90	..	17	3	5	8	..	4
91–100	12	13	14	4	18	2	14
101–110	..	3	..	..	2	1	..
111–120	14	11	1	7	14	4	6
121–130	..	4	..	1	5	1	2
131–140	21	12	..	..	3	..	2
141–150	..	4	..	1	4	..	2
151–160	35	11	..	2	4	..	1
161–170	..	..	..	..	..	..	4
171–180	33	7	..	1	5	..	6
181–190	..	..	..	..	..	..	..
191–200	35	3	..	..	9	..	..
201–210	..	..	..	..	..	..	..
211–220	18	..	..	..	..	..	..
221–230	..	..	..	..	..	..	..
231–240	42	2	..	..	6	..	..
241–250	..	..	..	..	..	..	..
251–260	15	..	..	..	..	..	..
261–270	..	..	..	..	..	..	..
271–280	45	..	..	..	..	..	..
281–290	..	..	..	..	..	..	..
291–300	13	..	..	..	8	..	..
320	25	..	..	..	..	..	..
340	6	..	..	..	..	..	..
360	7	..	..	..	..	..	..
No. of schools	385	380	381	371	353	345	298
Median.....	200	31–40	11–20	21–30	41–50	11–20	21–30
First quartile	140	21–30	1–10	11–20	21–30	..	11–20
Third quartile.....	260	71–80	31–40	31–40	81–90	31–40	51–60

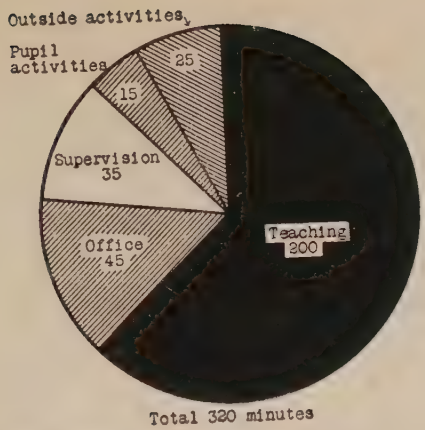

Diagram 5.—Distribution of the principal's time during the school day. Figures represent the median number of minutes devoted to each phase of his work

utes a day. Other principals reported that they gave a large amount of time to such work, but did it all out of school hours and found it hard to give any accurate estimate. (See Table 18.) Table 19 summarizes the work of the high school principal for each day in the rural high schools of New York, and shows that the median principal gives each day five periods to teaching; one period to supervision of instruction, 11 to 20 minutes of it being devoted to the high school and 21 to 30 minutes to the elementary grades; approximately 50 minutes to office work; 11 to 20 minutes to pupil activities; and 21 to 30 minutes to non-pupil activities related to school work.

Teaching Load of Teachers

The data on the daily teaching load of the high school teacher (not including the principal), as shown by the daily schedule of 913 teachers in the New York rural high schools in 1920–21, shows the following facts: The median number of subjects handled by teachers in schools with an enrolment under 50 was 3.8, with over 20 percent of the teachers in these schools giving daily instruction in five or more subjects. In schools with a high school enrolment of 50 to 99, the median number of subjects handled was 3.2, with

TABLE 20.—THE HIGH SCHOOL TEACHER'S DAILY TEACHING LOAD, EXPRESSED IN TERMS OF—

(A) Number of different subjects taught
(B) Number of periods of class-room teaching
(C) Number of periods on duty, teaching plus study-room supervision

Number of subjects taught (A)	Number of teachers	Number of periods of class-room teaching (B)	Number of teachers	Number of periods of teaching and study-room supervision (C)	Number of teachers
I. High schools with an enrolment of 1–49 pupils					
1	10	4	5	5	22
2	71	5	59	6	60
3	107	6	122	7	97
4	79	7	83	8	141
5	48	8	59	9	10
6	17	9	2	10	3
7	4	10	3	11	3
8	..	11	3	12	..
Median...3.8	336	6.8	336	7.8	336
II. High schools with an enrolment of 50–99 pupils					
1	18	4	14	4	..
2	89	5	71	5	25
3	71	6	103	6	44
4	39	7	41	7	101
5	24	8	14	8	71
6	3	9	2	9	4
7	1	10	..	10	..
Median...3.2	245	6.3	245	7.5	245
III. High schools with an enrolment of 100 and above					
1	70	3	4	4	1
2	126	4	31	5	56
3	87	5	97	6	96
4	32	6	133	7	124
5	13	7	60	8	55
6	4	8	7	9	..
Median...2.7	332	6.2	332	7.1	332
IV. Total for all high schools					
1	98	3	4	4	1
2	286	4	50	5	103
3	265	5	227	6	200
4	150	6	358	7	322
5	85	7	184	8	267
6	24	8	80	9	14
7	5	9	4	10	3
8	..	10	3	11	3
9	..	11	3	12	..
Median...3.3	913	6.4	913	7.4	913

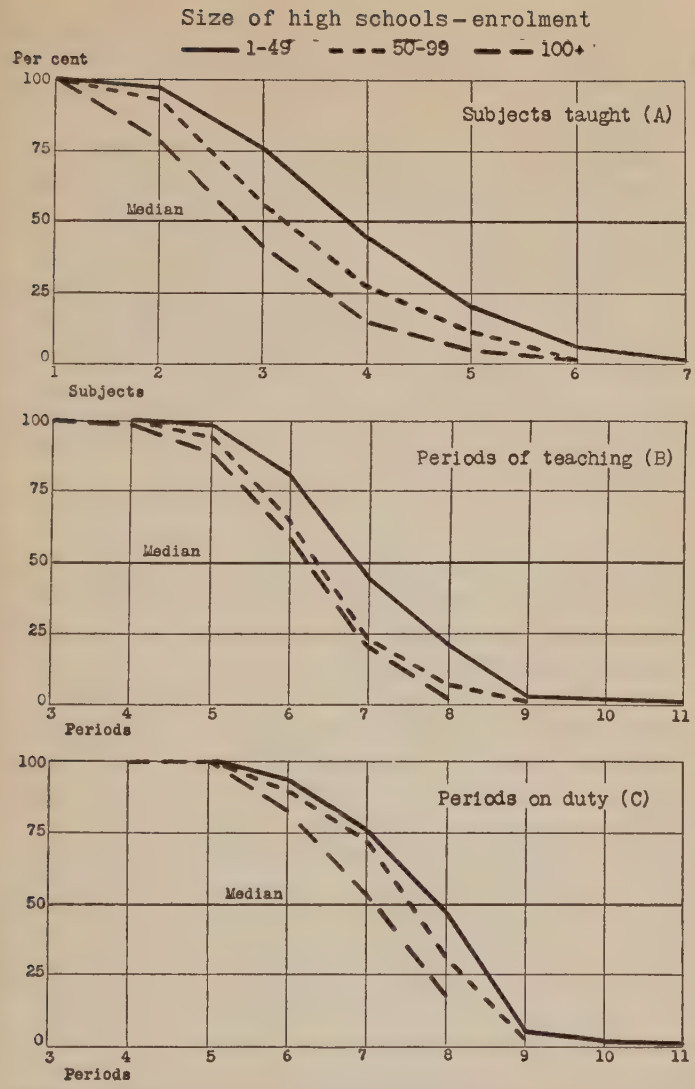

Diagram 6.—The rural high school teacher's daily teaching load. (A) Percent of teachers teaching the number of subjects shown or more. (B) Percent of teachers teaching the number of periods shown or more. (C) Percent of teachers on duty, teaching and class-room supervision, the number of periods shown or more

many giving instruction in as many as four and five subjects. For schools with an enrolment above 100, the median number of subjects handled was 2.7, with many giving instruction in four and five subjects.

For schools with a high school enrolment under 50, the median number of recitations a day was 6.8. The significant fact here, however, is that 67 teachers, or more than 19 percent, taught eight or more periods a day, while eight teachers taught nine or more periods a day. In schools with an enrolment of 50 to 99, the median teaching load was 6.3 periods, with 22 percent of the instructors teaching seven or more a day. In schools with an enrolment of 100 and above, the daily teaching load was 6.2 periods. For all rural high schools the median number of recitations a day for each teacher was practically six and a half, with 30 percent of the instructors teaching seven periods or more.

The median number of periods a day for each teacher in instruction and supervision of the study room in the smaller high schools was 7.8, with 157 teachers, or 46 percent, carrying a load of eight periods or more. In schools with an enrolment of 50 to 99, the median number of periods of teaching and study-room supervision was 7.5, and for schools with an enrolment of 100 or more it was 7.1 periods a day. For all rural high schools the number of periods a day for each teacher in teaching and study-room supervision was 7.4, but with 287, or over 31 percent of the teachers reporting, having a daily schedule of eight periods or more given to class-room instruction and study-room supervision. (Table 20.)

The study of the teaching load in the rural high schools of New York, both for principals and teachers, shows that it is far in excess of that regarded as standard in the United States. Many of the State departments of education are recommending in their State courses of study for high schools that five or six periods a day be the maximum teaching load for instructors in high schools. As examples, West Virginia and Virginia recommend five, and Indiana, New Jersey, Missouri, and Florida six periods. The North Central Association of Colleges and Secondary Schools recommends five periods a day for the high school instructor and will not admit to membership any school requiring more than six periods a day. In

the light of these standards New York conditions, particularly in the smaller schools, seem very unsatisfactory. This is particularly true of the schools with a pupil enrolment under 50.

The number of pupils per teacher in the rural high schools of New York offsets in some degree the excessive teaching load as measured by the amount of daily teaching and study-room supervision. The average number of pupils per teacher in the rural high school was 17, as compared with 28 pupils per teacher in a random selection of twenty-five city high schools of New York. While the number of subjects handled by the individual instructor and the number of periods of teaching in the rural high schools are very high, the number of pupil hours is comparatively low. The significant facts are, however, the wide range of subjects handled by the teacher in the rural high school and the large number of periods of class-room instruction.

Size of Classes

A large percentage of the classes in the smaller schools contained five or less pupils. A study as to the size of classes in 184 rural high schools (a random selection), distributed among the several classes of high schools based on number of high school pupils enrolled, showed the following facts. The median class in schools with an enrolment under 50 contained 6.8 pupils; in schools with 50–99 pupils, 11.6 pupils; in schools with 100 to 149 pupils, 16.3 pupils; and in schools with over 150 pupils, 18.2 pupils. In schools with an enrolment under 50, over 36 percent of the classes contained but five pupils or less; and in schools with 50 to 99 pupils, approximately 18 per cent of the classes contained five pupils or less. (See Table 21.)[1]

It would seem that the problem of reducing the teaching load in the rural high schools is closely related to the problem of organization and administration of classes. It is probably not feasible to reduce the number of subjects offered in the rural high school. In fact, if the rural high school is to meet the demands upon it, the number will need rather to be increased.

If the rural high school is to offer an adequate range of subjects, its per pupil cost of instruction must undoubtedly be higher than

[1] For size of classes in different subjects see discussion on curriculum, Chapter V.

TABLE 21.—THE SIZE OF CLASSES IN NEW YORK RURAL HIGH SCHOOLS GROUPED ACCORDING TO NUMBER OF PUPILS ENROLLED. (A STUDY OF 184 SCHOOLS, A RANDOM SELECTION: 101 SCHOOLS WITH AN ENROLMENT OF 1–49; 45 SCHOOLS WITH AN ENROLMENT OF 50–99; 22 SCHOOLS WITH AN ENROLMENT OF 100–149; AND 16 SCHOOLS WITH AN ENROLMENT OF 150 AND ABOVE)

Type of school	Size of classes						Total Number of classes	Median	First quartile	Third quartile
	1–5 pupils	6–10 pupils	11–15 pupils	16–20 pupils	21–25 pupils	26 and over				
1–49 pupils	611	596	279	93	48	28	1,655	6.8	3.4	10.7
50–99 pupils	179	262	213	182	90	89	1,015	11.6	6.4	17.9
100–149 pupils	87	107	98	193	139	57	681	16.3	8.9	20.9
150 and above	48	86	61	196	201	48	640	18.2	12.1	22.2
Total	925	1,051	651	664	478	222	3,991	10.2	5.3	17.8
Percent schools 1–49 pupils	36.9	36.0	16.8	5.6	2.9	1.7	..	..	..	..
Percent schools 50–99	17.6	25.8	21.0	17.9	8.9	8.8	..	..	..	..
Percent schools 100–149	12.8	15.7	14.4	28.3	20.4	8.4	..	..	..	..
Percent schools 150 and above	7.5	13.5	9.5	30.6	31.4	7.5	..	..	..	..
Percent for the 184 schools	23.2	26.3	16.3	16.6	12.0	5.6	..	..	..	..
Connecticut high schools 1–100 pupils, 1920–21[1]	22.3	28.0	21.2	13.8	5.4	9.3	..	..	..	..
Massachusetts high schools 1–50 pupils, 1917–18[2]	27.0	33.0	25.0	10.0	4.0	2.0	..	..	..	..
51–100 pupils	14.0	29.0	23.0	20.0	9.0	4.0	..	..	..	..

[1] Organization and Administration of High Schools in the State of Connecticut, 1921, Jesse B. Davis.

[2] Report on High Schools for the Year 1917, Mass. Board of Education, Bul. 1918, Number 5.

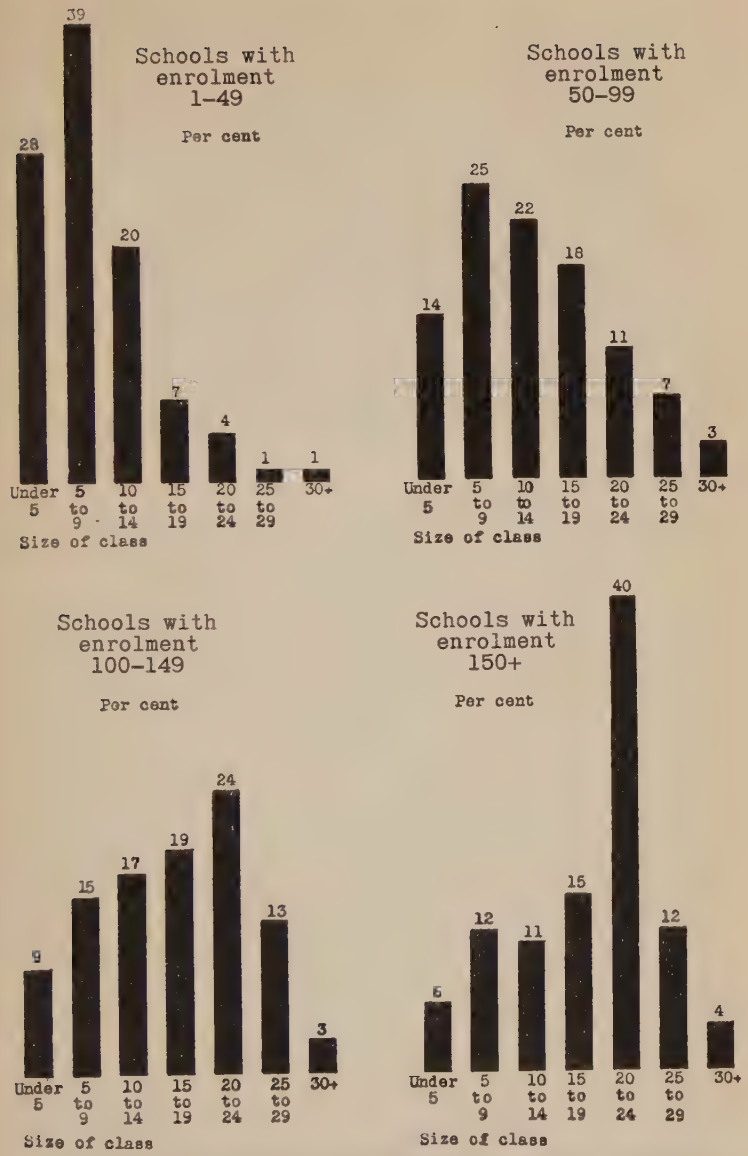

Diagram 7.—The size of classes in the different types of rural high schools

that of the city high schools. In many cases, however, it would seem that the classes with an enrolment under five might be met a less number of periods a week, and because of the semitutorial nature of such instruction still maintain a good standard. Another possibility of relieving teachers to some extent of the heavy teaching load is the alternation of classes. By beginning certain subjects, as French or Latin, every second year instead of every year, and by alternating subjects like third and fourth year English, as is now done in many schools in chemistry and physics, much economy in number of instruction hours might be effected. One or both the plans might be used in a small high school to reduce the number of hours of instruction and give the high school teacher more time for the preparation of his teaching plans, and, what is of almost equal importance, more time for the encouragement and guidance of pupil activities.

Reorganization in the Seventh and Eighth Grades, either in the Modification of the Course of Study or of Organization, to Link Them up with the High School

The information given by 405 principals in reply to this item shows that approximately 25 percent of the rural high schools have made no change in the 8–4 plan of organization to link up the elementary grades closer with the high school. Approximately 75 percent of the schools have used some plan to relate the work of the grades with that of the high school. An analysis of the means employed, however, shows that they are of the more doubtful types, both from the standpoint of increased interest on the part of the pupils and from the standpoint of the fitness of the means to the maturity of the pupils. Comments from several of the principals indicate that the underlying reasons for the most common changes, placing high school subjects, such as Latin and algebra, in the elementary grades, were not those of better fitting the school work to the pupils in a vital sense, but to secure an extra year for elementary high school mathematics and the first two years of Latin and hence give the pupils a longer time to prepare for the Regents examinations in those subjects. Over 35 percent of the schools reporting were requiring high school algebra in the 8th grade and over 10 per-

cent of the schools were requiring Latin in the 8th grade. Ten percent of the schools were giving science, in nearly every instance high school biology, in the 8th grade, a doubtful procedure considering the nature of the New York State course in biology. More vital changes reported by several schools were: promotions by subject, mentioned by 19 schools, departmental instruction, mentioned by 33 schools, and sitting in the general study room with high school pupils given by 32 principals of the smaller high schools. Other means given were commercial subjects in the upper grades, drawing, literature, civics and history. (See Table 22.)

TABLE 22.—REORGANIZATION IN THE SEVENTH AND EIGHTH GRADES EITHER IN THE MODIFICATION OF COURSE OF STUDY OR OF ORGANIZATION TO LINK THEM UP WITH THE HIGH SCHOOL. (DATA FROM 405 RURAL HIGH SCHOOLS)

Types of schools	1–49 pupils less than 4-year schools	1–49 pupils	50–99 pupils	100–149 pupils	150 pupils and over	Total
No form of reorganization	16	46	24	13	2	101
Using some plan of reorganization	42	117	89	36	20	304
Upper grades sit with high school	12	20	..	..	..	32
Promotion by subject in upper grades	..	..	10	5	4	19
Departmental instruction	1	6	2	12	6	27
Junior high school	1	1	2	3	4	11
Latin	3	19	13	8	..	43
Algebra	14	60	45	19	7	145
History	..	..	9	..	..	9
Science	4	22	13	..	2	41
Civics	3	15	7	..	..	25
Literature	..	21	10	3	1	35
Physical geography	..	..	1	..	..	1
Commercial subjects	3	11	11	6	..	31
Vocational subjects	4	4	5	..	4	17
Drawing	2	7	5	3	..	17
English grammar	1	2	..	..	..	3

Junior High School Organization

In reply to a questionnaire sent out from the office of the Assistant Commissioner for Secondary Education, in February, 1921, asking for information as to the schools having a Junior high school and their aims, methods and courses of study, twelve principals from the 609 rural high schools reported such an organization. Two schools of the 609, not reported in the questionnaire as having Junior high schools had a Junior high school in 1920–21. Thus in 609 rural high schools there were 14 schools having some form of Junior high school organization.

The data from the 12 schools reporting to the Assistant Commissioner for Secondary Education offer the following facts:

Aims:

Hold pupils	2
Lessen pressure in the high school	1
Departmental work	5
Save pupils' time	1
Flexibility of promotion	2
Election of subjects	1
Give more responsibility to pupil	1
Pass preliminary subjects	1
Supervised study	1
Bridge chasm between elementary grades and high school	1
Segregation of boys and girls in class and study	1
Give some worthwhile high school work to pupils who plan to leave school early	1

The following were the statements made in reply to the question as to course of study used:

1. Same as State outline for 7th and 8th grades except algebra in 8A.
2. Regular 7th and 8th grade syllabus.
3. Regular 7th and 8th grade work.
4. Regular 7th and 8th grade work.
5. Regular 7th and 8th grade work.
6. Begin Latin in 7th grade, French, algebra, and mechanical drawing in 8th grade.
7. Commercial arithmetic or algebra in 8A, commercial geography in 8th grade.
8. Regular work plus domestic science, carpentry, civics, music and clay modeling.

9. General mathematics, general science, English, American history, drawing, and spelling.

10. Algebra in 8th A grade.

11. Regular work, also business writing, domestic arts, and chorus in 7th grade, business writing, domestic art, general science, shop work, and chorus in the 8th grade.

12. No statement as to course of study pursued.

The study of the 12 schools reporting shows that with the possible exception of three cases the Junior high schools are only nominally so and lack the fundamental characteristics of Junior high schools. The slowness of Junior high school development which has so much to offer in vitalizing education in the rural high schools of New York is probably due to two large factors: (1) The failure of the State Department of Education to assume leadership in the matter of Junior high schools in rural communities and to suggest ways and means of organization, and (2) in the rigid requirements of the State courses of study and preliminary examinations for the upper grades. No suggested curricula for Junior high schools have been offered by the State Department and indications are that the Junior high school has been discouraged in small systems, as a letter, Nov. 29, 1921, from the Examinations and Inspections Division to a principal of a school with an enrolment of 158 in the elementary grades and 41 in the high school, called attention to the inadvisability of a Junior high school in a system of that enrolment.

The study of the various phases of the rural high school problem in New York indicates the desirability of more closely articulating the high school with the elementary school. The development of a school organization and of curricula more vitally related to the needs of pupils in the upper grades and the first year of the rural high school should go far in bringing about such articulation. A secondary school system on the Junior high school plan or at least beginning with the seventh grade would seem to offer great possibilities for many rural communities. This would be especially true if the work of the first three years were designed to fit the needs, abilities, and interests of the pupils of the community and were not fettered by the traditional work in Latin and other foreign languages, and

mathematics as the core of the curriculum. Communities and local administrators looking toward a reorganization of their school system would undoubtedly receive much help if suggested plans of organization and curricula for Junior high schools based upon a study of the needs and resources of rural communities and the more generally accepted principles underlying the Junior high school movement were available from the State Department.

It should be noted that some years past a committee to work in coöperation with the State Examinations Board to formulate a State course of study for the Junior high or Intermediate School was appointed by the Commissioner of Education. This Committee made its final report November 29, 1921. The following quotation gives the tenor of the report of this committee:

"At the time this Committee was appointed, doubt was expressed as to whether we had progressed sufficiently far in the development of the Junior High School to warrant an attempt to formulate a State-wide course of study for this type of school organization. Subsequent experience has simply confirmed that doubt and this report is a recommendation that the attempt be abandoned and the Committee discharged.

"Even under anything like normal conditions an experience of ten or fifteen years with the Junior High School would be little enough to warrant an attempt to formulate a State-wide course of study. Furthermore, it would be practically imperative that this experience include not simply the larger city school systems but that it include at least a few type communities throughout the State. It is reasonable to suppose that had it not been for the general retarding effect of war conditions upon public school development, the extension of this school organization would have been more widely adopted in the State than it has. However that may be, the fact remains that in the judgment of your Committee our experience is not yet sufficiently long nor sufficiently broad to warrant further attempt at this time to formulate a State-wide Junior High School course of study.

"There is also another factor in this situation. Due to a good many causes, one of which has doubtless been the spread of the Junior High School unit throughout the country, rather intensive

studies are now being made of some very important lines of work that affect this problem. This is particularly true of Latin, for example. Furthermore, there is a rather wide-spread uncertainty with reference to the place and nature of such other subjects as general science, modern language, and mathematics. Serious thought and attention are being given to all these lines, and the reports which result should be available before the State itself specifically sets forth a Junior High School syllabus."

CHAPTER III

THE ADMINISTRATION AND SUPERVISION OF THE RURAL HIGH SCHOOL

The Principal's Work as Director and Supervisor of Instruction in the New York Rural High Schools

THE data given by 360 principals as to the number of meetings held each month for the discussion of the problems of the school, and by 296 principals as to the number of individual conferences with high school teachers each month, point to some interesting facts. Of the principals reporting, 78 reported no meetings of high school teachers and 160 reported one meeting a month. Over 65 percent of the principals reporting held only one or no meetings a month for high school teachers. Less than 45 percent held two or more such meetings a month. (See Tables 23 and 24.)

Table 23.—Number of High School Teachers' Meetings Held by Principal each Month. (360 Schools)

Number of meetings a month	Types of schools (on basis of number of pupils enrolled)					Total number of schools reporting
	1–49 less than 4 years	1–49	50–99	100–149	150–	
0	45	18	13	2	..	78
1	8	59	56	26	11	160
2	4	16	18	13	8	59
3	..	9	9	2	..	20
4	5	21	10	5	..	41
5	..	1	1	..	..	2
Total.....	62	124	107	48	19	360

TABLE 24.—NUMBER OF INDIVIDUAL CONFERENCES WITH TEACHERS CONCERNING THEIR WORK BY PRINCIPAL EACH MONTH. (296 SCHOOLS)

Number of conferences each month	Types of schools					Total
	1–49 less than 4 years	1–49	50–99	100–149	150–	
0	12	13	4	..	1	30
1	6	14	11	6	..	37
2	2	10	19	2	6	39
3	1	8	9	2	5	25
4	7	28	15	11	1	62
5 or more	2	37	39	18	7	103
Total.....	30	110	97	39	20	296

Thirty principals reported no conferences with individual teachers on teaching problems, and one hundred and six, two or less a month. All the facts gathered from all sources, questionnaire to principals, data from field work on the survey with regard to problems of the high school principal in administration, organization, and supervision, emphasize the same difficulties. In the smaller schools the principal is regarded primarily as a class-room teacher and has little defined authority as administrator and supervisor. His teaching schedule is so heavy as to give him little or no time for genuine principalship work. The most prominent problem coming from all types of principalships is lack of time for the administrative and supervisory phases of their duties. This, combined with the lack of specific definitions as to the principal's status in the administration and organization of his school, undoubtedly hinders the development of the most efficient type of principalship in the New York rural high schools.

The problems taken up in meetings of high school teachers are important problems, but reflect in the main lack of attention to the means for modernizing and vitalizing high school instruction and high school government. The outstanding problems discussed were,

in the order of the frequency of their mention, pupil discipline, attendance and tardiness, retarded pupils, securing the interest of pupils in class-room work, and maintaining their continuous effort. Other frequently mentioned problems were home study, class-room management and methods, improving scholarship of pupils, the selection of text-books, promotions, and pupils' marks. Topics less often reported as the problems for discussion in high school teachers' meetings were: supervised study, extra-class-room activities, the use of standardized tests in high school work, silent reading, the making of an assignment, the daily program, pupils' health, how to study, basis for admission to Regents examinations, the uses of the question in teaching, and character building. The latter problems are mentioned only sporadically and infrequently.

As to the most perplexing problems of administration and organization, the replies of principals showed extraordinary agreement. The most common problem, mentioned by practically 100 principals, was that of insufficient time for meeting their administrative duties. Closely related to it was the second most commonly mentioned problem given by over 70 principals, that of inadequate teaching force, and the third, the difficulty of securing good teachers, those with either professional interest or attitude. Two other problems given more than 70 times were the problems of inadequate room and library and laboratory equipment, and inadequate playground facilities. Other problems commonly stated were, in the order of frequency: lack of coöperation on the part of parents, securing the interest of pupils in a narrow classical curriculum, overcoming pupils' aversions to school work, attendance, congestion caused by repeaters, lack of pupil social organizations, grading, scholarship, clerical help, and development of pupil leadership.

From the viewpoint of a supervisor the problems in order of the frequency with which they were mentioned were: insufficient time, non-professional attitude of teachers, insufficient teachers, lack of interest on the part of pupils, scholarship, grading, heavy teaching load, over-ageness of pupils, crowded conditions, and discipline.

The majority of high school principals offered suggestions as to steps that might be taken to improve rural high schools. In the

order of the frequency of their occurrence these suggestions were as follows:

More vocational work, particularly agriculture and homemaking.
Consolidation of school districts tributary to local high school.
Better rural teachers.
More teachers.
Less emphasis upon Latin and other foreign languages.
Wider curricula and more practical courses of study.
More helpful supervision and assistance from state inspectors.
More time for supervision.
Larger units of taxation and equalization of taxes.
Adjustment of high school curricula to local needs.
Live Parent-Teachers' associations.
More State aid for rural high schools.
Longer tenure for principals and teachers.
Junior high schools.
Less emphasis upon Regents examinations.

The Extent to Which the Principal has a Voice in the Selection of Teachers and the Assignment of Work to His Teachers

The data supplied by 389 principals as to their part in the selection of their teaching staff indicate a lack of clearness as to the

Table 25.—The Extent to Which the Principal has a Voice in the Selection of Teachers. (389 Principals)

Voice in selection of teachers	1–49 less than 4 years	1–49 4 years	50–99	100–149	150–	Total
None	24	51	6	..	..	81
Very little	..	11	5	..	1	17
Advisory	18	47	33	13	6	117
Recommends or appoints on approval of board	10	56	52	35	15	168
With dist. supt.	6	..	..	..	..	6
Total	58	165	96	48	22	389

principal's function. Ninety-eight principals or 25 percent report no or very little voice in the selection of their high school teaching corps; 117 principals or 30 percent report advisory voice; 168 principals or 43 percent have either the power of recommendation or of appointing teachers subject to the approval of the school board. The larger percentage of principals having little or no voice in the selection of their teaching staff is found in the smaller high schools, while the larger percentage exercising recommendatory or appointment powers is in the larger high schools. (See Table 25.)

In the assignment of work to teachers there is greater uniformity in practice. The majority of principals here have the deciding voice, although 49 principals, largely in the smaller schools, have little or no voice even in this phase of the principal's work. (See Table 26.)

TABLE 26.—THE PRINCIPAL'S RESPONSIBILITY IN THE ASSIGNMENT OF TEACHER'S WORK. (389 PRINCIPALS)

Voice in assignment of work to teachers	Types of schools					Total
	1–49 less than 4 years	1–49 4 years	50–99	100–149	150–	
None	16	18	3	..	..	37
Very little	1	11	..	..	..	12
Part authority	13	33	10	3	5	64
All	25	86	93	45	17	266
All in high school, none in grades	..	4	..	..	..	4
With dist. supt.	6	..	..	..	..	6
Total	61	152	106	48	22	389

The lack of voice which the high school principal has in the selection of his teachers, particularly marked in the smaller high schools, has a very direct bearing upon the work of these schools. In the

first place, the teachers are elected by the school board, frequently with no definite knowledge with regard to the subjects which they must teach, or often as to the subjects which they are best prepared to teach. As a result the principal in organizing the work of his school often finds that he must assign to teachers subjects which they are not at all prepared to handle. In the second place, it takes away from the principal an important factor operating in the direction of staff loyalty and coöperation, in that his estimate of a teacher's work in the school tends to have little or no weight. It deprives the principal of one of his most useful powers as the executive head of the school.

State Inspection of Rural High Schools

The total number of State inspections of high schools to May 25 of the school year 1920–21, not including the visits made by the supervisory staff of the Division of Vocational and Extension Education, was 736. Of this number district superintendents made the inspections for 127 high schools and reported their findings to the State Department. A careful study of 108 of the inspections made by district superintendents in 1920–21 and of 86 inspections made by the Examinations and Inspections Division in 1919–20 and 1920–21, indicates that the work is primarily and mainly inspectional in character and that it does not to any great extent function as a supervisory agent. This is probably as it should be. There is evidence, however, that the State Department does consciously aim to function in a supervisory way. The fact that the inspection of 127 of the small rural high schools was delegated to the district superintendents in 1920–21, a large proportion of which inspections were made late in the spring, shows definitely that as a helpful supervisory agent the State Department is failing where help is most needed—in the smaller and weaker high schools. One inspector writes in his inspection report of a small high school that it was the first inspection made by the State Department in that school in five years.

An analysis of the schools inspected by district superintendents for the year 1920–21 shows that the schools were distributed as follows and were of the following types:

Center in which located	Type of school inspected				Total
	Junior	Middle	Senior	High school	
Rural community	15	12	25	17	69
250 or under	..	1	1	2	4
250– 500	2	3	6	9	20
500– 750	5	1	1	4	11
750–1,000	..	..	1	1	2
1,000–1,250	..	..	..	..	..
1,250–1,500	..	..	..	..	..
1,500–1,750	..	..	..	..	..
1,750–2,000	..	..	..	..	..
2,000–2,250	..	..	..	..	..
2,250–2,500	1	..	..	1	2
Total	23	17	34	34	108

An analysis of the inspections made by the State Department shows that the larger high schools receive much more attention than the smaller schools. These inspections are to a large extent inspections as to the teaching of some particular high school subject. Frequently they are made at the request of a superintendent or high school principal who wishes assistance in estimating the character of the work of a particular teacher. The following random selection from schools receiving more than one visit in 1920–21 indicates the extent to which the attention of the State Inspectors tends toward the larger schools:

Name of high school	Number of inspections	Population of center in which located. U. S. census, 1920	High school enrolment 1916–1917
Horseheads	4	2,078	130
Gowanda	2	2,673	57
Huntington	3	9,000	247
Lansingburg	4	?	243
Gouverneur	2	4,143	228
Hudson Falls	3	5,761	249
Medina	4	6,011	196
Lancaster	5	6,059	86
Mynderse Academy, Seneca Falls	3	6,389	175
Ilion	3	10,169	351
Johnstown	2	10,908	291
Little Falls	3	13,029	203
Corning	6	15,820	341
Glens Falls	3	16,638	337
Lackawanna	3	17,918	139
Newburgh Free Academy	4	30,366	590
Lafayette High School, Buffalo	3	506,775	1,143

The above facts seem to indicate that the energy of the State Examinations and Inspections Division tends to gravitate toward the larger high schools. There arises a question as to the soundness of this policy. It is evident that these larger high schools, with their better equipment, better administrative and supervisory force, better teaching staff, and general advantages, should need less outside assistance than the small rural high school with its comparative lack of equipment, poorer teaching force, and inadequate organization from the standpoint of administration, direction, and supervision.

A close study of the inspections made by district superintendents for 1920–21 yields the following facts as to points of emphasis and nature.

Generally commendatory as to organization, discipline, and instruction	85
Indefinite generalizations	31
Detailed and specific	12
Adverse in general	3
Containing nothing on instruction	5
Suggestions as to methods of instruction	8
Suggesting more supervision by principal with no suggestions as to the way in which this might be accomplished	6
Suggesting need of more teachers	10
Pointing out inadequacies of building and equipment	12
Reports of conferences with high school teachers	5
Suggesting changes in organization	5

A study of the inspections made by the State Examinations and Inspections Division indicates the following points of emphasis:

Building and equipment inadequate	21
Recommended reorganization of distribution of work to teachers	12
Calling attention to school's standing in Regents examinations	11
Suggested better methods of instruction	7
Adverse criticism as to results in special high school subjects	19
Favorable comment on work in special subjects	16
Commended the school spirit	4
Recommended new course of study	4
Recommended the teaching of fewer subjects	4

The reports on inspections as made by the inspectors of the Department in the main indicate a broad conception as to the function of high school education and an earnest desire to be of service to the high schools of the State. As an agent working effectively, however, in directing and improving the organization and instruction of the rural high school, it seems inadequate because of the infrequency of the inspections and because of lack of direct and vital touch with the principal and teachers and their problems and because of lack of persons peculiarly fitted and specifically trained to direct in the general organization of the school and in improving class room management and general methods of teaching in several subjects. (See Table 27.)

TABLE 27.—NATURE OF ASSISTANCE GIVEN HIGH SCHOOL PRINCIPAL: (*a*) BY DISTRICT SUPERINTENDENT (354 SCHOOLS); (*b*) BY STATE DEPARTMENT (340 SCHOOLS)

(*a*) Assistance from District Superintendent

Types of schools	No help	Advises	Supervises	Visits	Total
1–49 less than 4 years	20	19	6	17	62
1–49	..	59	49	..	108
50–99	32	36	16	29	113
100–149	25	15	..	9	49
150 and over	15	3	2	2	22
Totals	92	132	73	57	354

(*b*) Assistance from State Department

Types of schools	No help	Visits	Inspects	Supplies educational materials	Conferences	Total
1–49 less than 4 years	30	7	5	14	5	61
1–49	..	..	25	48	30	103
50– 99	29	22	23	21	8	103
100–149	12	17	..	10	13	52
150 and over	3	7	6	..	5	21
Totals	74	53	59	93	61	340

School Records

Three hundred and sixty schools, or 90 percent of those reporting on the item of school records, use a cumulative record card system; 40 or 10 percent of the schools use some other method of keeping pupil records. Other forms of records specifically mentioned are: record book nine schools: Regents Record Book nine; Bardeen's Regents record seven; pupils' report cards six; class records one. (See Table 28.)

Table 28.—Types of School Records Kept on File in Local High School Office. (400 Schools Reporting)

Types of records kept	Schools 1–49 pupils less than 4 years	1–49 pupils	50–99 pupils	100–149 pupils	150 pupils and over	Total
No card index....	12	22	6	..	..	40
Cumulative card index.....	42	140	107	49	22	360
Other recording devices.....	Record book 4 Regents record 4 Class record 1 Reports 2	Book record 3 Report cards 4 Bardeen Regents record 7 Academic record card 3	Regents record book 5 Leighton System 9 ..	Leighton cards 3 State form Permanent book record 2 ..	..	..

There seems to be, with the exception of a very few schools, the practice of keeping only the pupil's academic record, and in some schools only his record in Regents examinations, where these are the only basis of graduation. In only a few of the rural high schools is a record kept of the pupil's activities out of the class-room or of his occupational and other experience valuable for guidance purposes.

Pupil Guidance

The New York rural high schools do very little in a definite organized way in the matter of educational and vocational guidance of pupils. The systems of school records generally used do not give the material most useful in pupil guidance and undoubtedly the

heavy teaching schedule of both teachers and principals and the lack of clerical assistance do not favor the development of definite plans for pupil guidance.

Information supplied by 405 principals shows the following facts with regard to the status of pupil guidance: Two hundred and twelve schools or 52 percent use no definite plan of pupil guidance while 47 percent or 193 have organized, principally through the teacher's advisory plan, to give pupils guidance in their vocational plans and in the selection of their school work. Thirteen of the larger schools report courses or plans for courses in the study of occupations; 74 schools are giving occupational talks to the high school pupils; 26 schools report the use of vocational reading; and 39 schools mention observation trips taken with the view to giving vocational information to pupils. One hundred nineteen schools call attention to the fact that they give the pupil guidance through the regular high school courses, while several mention private consultations, motion pictures, and individual help. (See Table 29.)

TABLE 29.—WAYS AND MEANS OF PUPIL GUIDANCE IN NEW YORK RURAL HIGH SCHOOLS. (405 SCHOOLS)

Plans of pupil guidance	1–49 less than 4 years	1–49	50–99	100–149	150	Total
No definite plan of guidance	37	104	53	12	6	212
Guidance	25	58	60	36	14	193
Teacher adviser	25	56	60	35	14	190
Course in study of occupations	..	..	5	4	4	13
Occupational talks	7	17	35	9	6	74
Vocational readings	5	6	6	5	4	26
Observation trips	4	10	12	8	5	39
Other means	Individual attention 3 Pupils are too young 1	Motion pictures 2 Parent-Teachers' Assoc. 1 Lectures by business men 1 Through regular courses 59	Individual help 13 Private consultation 1 Address from outside once a month. Through regular courses 60		..	..

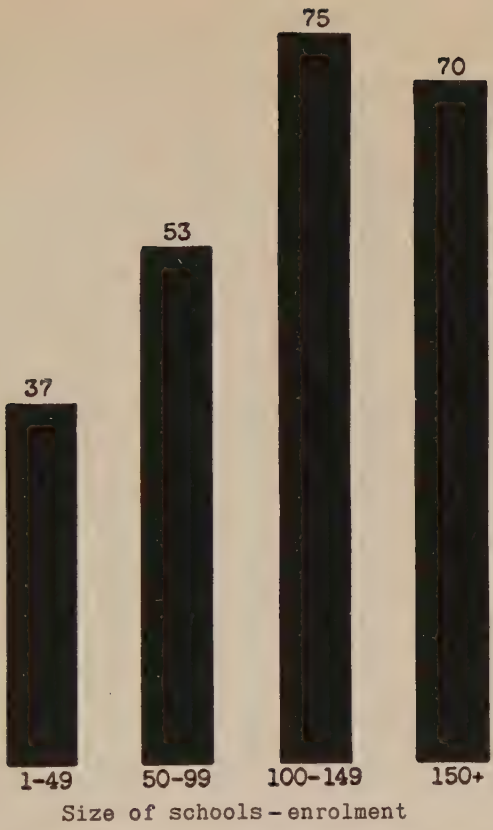

Diagram 8.—Percent of New York rural high schools of different types having pupil guidance

Supervised Study

In the matter of supervised study the majority of New York rural high schools have taken no definite steps. Of 405 schools, 270 or over 66 percent state that they use none of the regular plans for supervising the study of their pupils. One hundred thirty-five schools report a definite supervised study organization. Of these 135 schools using a definite plan for supervised study, 64 use the divided period; 23 schools report a double period plan, although

the nature of this is uncertain, since only two schools were organized on the 60-minute period basis. Seventy-four schools have scheduled conference periods with pupils. Twenty-six schools report supervision of pupils' study by a teacher in the general study room; seven schools give recitation periods to preparation of lessons; three have pupils go to teachers during teacher's free periods; six mention careful directions through the lesson assignments. One school is organized with a supervised study period at the end of the day, and one principal reports supervised study as unnecessary. Table 30 gives the details as they were reported by the 405 high school principals.

TABLE 30.—SCHOOLS HAVING SUPERVISED STUDY AND PLAN USED. (405 SCHOOLS)

Plan used	Schools 1–49 pupils less than 4 years	1–49 pupils	50–99 pupils	100–149 pupils	150 pupils and over	Total
No supervised study	45	105	75	28	17	270
Supervised study	17	54	38	21	5	135
Divided period	8	22	22	7	5	64
Double period	..	6	8	9	..	23
Scheduled conference period	9	26	18	18	3	74
	62	159	113	49	22	
Other plans	Principal does work in study room 3	Teacher in study hall 6	Study with classes 5	Teachers adapt work to classes 2	Pupils in study hall under teacher monitors 1	
	Try to point out special things in lesson period 2	Assignment explained 2	Study hall teacher oversees work 12	Deficient and younger pupils in study halls 3		
	Study in class during recitation 2	Personal aid to pupils 3	Period at end of day 1	Students keep record of time spent in home study 1		
	Pupil comes to teacher 1	Vacant periods of teachers 2	Unnecessary 1			

Extra-Class-Room Activities

One of the most striking facts coming from the study of New York rural high schools is the little attention and emphasis given to extra-class-room activities in their organization. This lack of emphasis upon extra-class-room activities of pupils is somewhat offset by the general practice of high school assemblies. But notwithstanding the impression left strongly on the mind of the person observing the rural high schools at work and in studying the facts with regard to their work is that there is here unused a great means of vitalizing the high school work, of improving the school spirit, and of giving New York rural high school boys and girls direct training in citizenship and avocational interests such as they cannot get through any study in the regular curriculum. It would seem to be one factor of great importance accounting for the magnitude of the problem of discipline in the high schools and for the general lack of spirit and interest on the part of high school pupils in their work so frequently found in all the comments of principals and teachers as to their most perplexing problems.

One hundred and eighty high schools out of 405 report no extra-class-room activities other than athletics, Boy Scouts, Campfire Girls, and Girl Scouts, and these with the exception of athletics are usually directed in the smaller schools by some person outside the school staff. In almost no instance do the extra-class-room activities come in the regular school day, but meet predominately in the evening or in the afternoon after school hours. Table 31 gives in detail the nature of the extra-class activities found in the various schools and the number of schools reporting such pupil organizations. Table 32 shows the times of meeting, the method of direction or control and the nature of the responsibility of the teacher where the teacher has a duty in regard to them.

High School Assemblies

It is the general practice of the rural high schools to have high school assemblies once a week or oftener. Twenty-four schools, however, or over 12 percent of those reporting, state that they hold no high school assemblies. In the majority of schools these are mainly in the nature of opening exercises and come in the regular

TABLE 31.—NUMBER AND KINDS OF EXTRA-CLASS-ROOM ACTIVITIES. (405 SCHOOLS)

Type of school	1–49 less than 4 years	1–49	50–99	100–149	150–	Total
1. Literary Club	3	13	15	9	1	41
2. Debating Club	1	9	8	7	8	33
3. Science Club	1	1	3	1	2	8
4. Orchestra	5	22	45	26	21	119
5. Glee Clubs	3	11	36	17	12	79
6. Athletic Assoc.	17	85	92	44	24	262
7. Boy Scouts	19	67	55	26	14	181
8. School Paper	8	37	58	28	18	149
9. Campfire Girls	11	36	30	21	12	110
10. Girl Scouts	4	..	9	4	5	22
11. Hi Y	..	..	2	3	1	6
12. Dramatic Club	3	6	1	1	1	12
13. French Club	..	1	3	1	1	6
14. Girl Reserves	..	4	3	..	..	7
15. Class Clubs	2	3	6	3	..	14
16. Thrift Club	..	..	1	..	..	1
17. Woodcraft Girls	..	..	3	..	..	3
18. Sewing Club	4	3	1	..	..	8
19. Bird Club	..	1	1	..	..	2
20. Social Circle	1	..	3	..	..	4
21. Health Club	1	3	..	..	..	4
22. Short Story Club	..	1	..	..	..	1
23. Latin Club	..	1	..	1	..	2
24. Band	..	1	..	..	..	1
25. History Club	..	1	..	..	..	1
26. Oral English Club	..	..	..	1	1	2
27. Art Club	..	..	..	1	..	1
28. Radio Club	..	..	..	1	..	1
29. Y. W. C. A.	..	..	..	1	1	2
30. Y. M. C. A.	..	..	..	1	2	3
31. Tennis Club	..	..	..	2	..	2

daily program organization and are of but ten to twenty minutes in length. They are almost invariably conducted by the principal or a teacher and consist in Scripture reading, singing, and announcements by the principal. In many of the schools pupils are required to give in the assembly some form of rhetoricals once a year, and in 141 of the schools reporting, programs are given by the pupils. Fifty-one schools report talks, 10 mention music by the school orchestra and other pupil musical organizations; 18 schools

TABLE 32.—EXTRA-CLASS-ROOM ACTIVITIES: TIME OF MEETING, METHODS OF CONTROL, NATURE OF TEACHERS' RESPONSIBILITY. (405 SCHOOLS)

(a) Time of meeting

Type of school	Morning	Noon hour	Afternoon	Out of school hours	Time not given	No extra-class-room activities
1–49 pupils	..	2	2	45	26	146
50–99 pupils	1	2	1	66	15	28
100–149 pupils	..	..	3	31	8	7
150 pupils and over	1	..	2	16	2	1
Total	2	4	8	158	51	182

(b) Methods of control and number of schools reporting each method

Type of school	Principal or teacher	Parents	Pupils	Teacher or pupil
1–49 pupils	57	1	3	14
50–99 pupils	54	2	4	25
100–149 pupils	26	2	..	14
150 pupils and over	13	..	1	6
Total	150	5	8	59

(c) Nature of teachers' responsibility and the number of schools reporting each

Type of school	Director	Supervisor	Adviser	Leader	Scout master	Chaperone
1–49 pupils	12	12	46	5	..	..
50–99 pupils	15	12	42	7	8	1
100–149 pupils	7	3	30	1	..	1
150 pupils and over	2	2	16	..	..	..
Total	36	29	134	13	8	2

(d) Other social gatherings during the year under school direction, number given during the year, and number of schools reporting each number

Type of school	Number of such gatherings reported for the year								
	None	1	2	3	4	5	6	7	8 or more
1–49 pupils	65	62	31	29	19	9	11	6	1
50–99 pupils	24	4	12	14	12	10	9	1	19
100–149 pupils	9	1	11	5	3	2	3	2	12
150 pupils and over	..	..	..	3	4	1	4	1	6
Total	98	67	54	51	38	22	27	10	38

Table 33.—High School Assemblies

(a) Frequency

Type of school	Daily	Four a week	Three a week	Two a week	Weekly	Two a month	Monthly	None	Total
1–49 less than 4 years....	20	2	8	9	15	..	1	..	55
1– 49	62	1	25	28	29	..	..	10	155
50–99	30	3	14	24	35	..	..	10	116
100–149	13	1	8	7	5	..	1	4	39
150–	6	..	3	4	8	1	..	..	22
Total...	131	7	58	72	92	1	22	24	387

(b) Length in minutes

	10	15	20	25–30	40–45
1–49 less than 4 years...	26	12	6	11	1
1–49	16	75	38	16	..
50–99	7	49	31	17	2
100–149	2	15	8	10	..
150–	1	5	4	7	5
Total.....	52	156	87	61	8

(c) Method of conducting

By principals	By teachers	By pupil	By music director
40	12	4	..
91	46	8	..
69	27	7	3
24	6	..	5
17	..	1	4
Total.241	91	20	12

(d) Nature of exercises

Type of school	Scripture reading	Singing	Current topics	Pupil program	Rhetoricals	Talks	Orchestra and other pupil music	Folk plays	Prayer	Moving pictures
1–49 less than 4 years....	33	44	6	13	13	..	..	..	..	..
1–49	84	127	6	39	25	19	1	..	29	2
50–99	60	97	5	57	18	19	4	4	14	..
100–149	25	37	..	22	9	10	3	..	3	..
150–	12	21	1	10	8	3	2	1	3	..
Totals...	214	326	18	141	73	51	10	5	49	2

(e) Nature and amount of pupil participation

Type of school	No part	Very little	Coöperative control	Plan, prepare and present program	Make announcement pupil activities	Select songs	Supply the music
1–49	112	16	1	34	10	1	5
50–99	35	7	5	42	7	4	5
100–149	10	5	5	17	14	..	1
150–	1	2	..	8	2	..	..
Totals.....	158	30	11	101	33	5	11

report current events as a feature, and five give school plays as features of the school assembly.

As to the nature and amount of pupil participation in conducting the assemblies, 188 schools report that the pupils have little or no part, 121 report that the pupils plan, prepare and present programs; 33 report that the pupils make announcements of pupil activities; 11 that the pupils furnish the music, and 14 that the pupils coöperate with principal and teachers in controlling the assemblies.

The school assembly apparently has a real function in the rural high school, but a study of its predominant characteristics leads to the conclusion that it might be of much more value if the proportion of pupil responsibility for its control and programs were increased. (See Table 33.)

Community Organizations Actively Coöperating with the School

Reports from 392 principals indicate that in many communities local organizations are actively coöperating with the principal and teachers in making the work of the high school and the grades more effective. The most prominent community organizations back of the school and its work, as indicated by the data, are the Parent-Teachers' Associations and the Grange. Home and School Clubs, Women's Coöperative Clubs, and the Home Bureaus, are also active in many communities in advancing the work of the local high school.

A significant fact, however, is that 59 percent of the principals report no organized community effort being made to coöperate with the efforts of the schools. Another significant fact is that the greatest lack of community support, as evidenced by active assistance given the school in meeting its problems, is found with respect to the smaller high schools with a high school pupil enrolment of 49 or less. In these smaller schools 66 percent report no active coöperation of community organizations as compared with 50 percent for schools with a high school enrolment of 50 or more. In the smaller schools, active community coöperation is much too rare, and for all rural high schools in New York it is much less evident than in the case of city high school communities. (See Table 34.)

TABLE 34.—COMMUNITY ORGANIZATIONS ACTIVELY COÖPERATING WITH THE SCHOOL. (DATA FROM 392 SCHOOLS)

Type of school	No organization	Some organization	Parent-Teachers	Home and School Club	Women's Coöperative Club	Grange	Home Bureau	Community Center	Women's Christian Temp. Union	Red Cross	Alumni Association
1–49 enrolment less than 4 years	37	25	10	..	3	8	7	..	..	..	..
1–49	112	50	19	..	10	21	..	3	..	..	..
50–99	55	55	25	20	..	15	..	2	5	..	..
100–149	23	13	13	..	..	6	4	..	..	3	4
150–above	7	15	9	..	3	5	..	..	..	..	..
Total	234	158	76	20	16	55	11	5	5	3	4

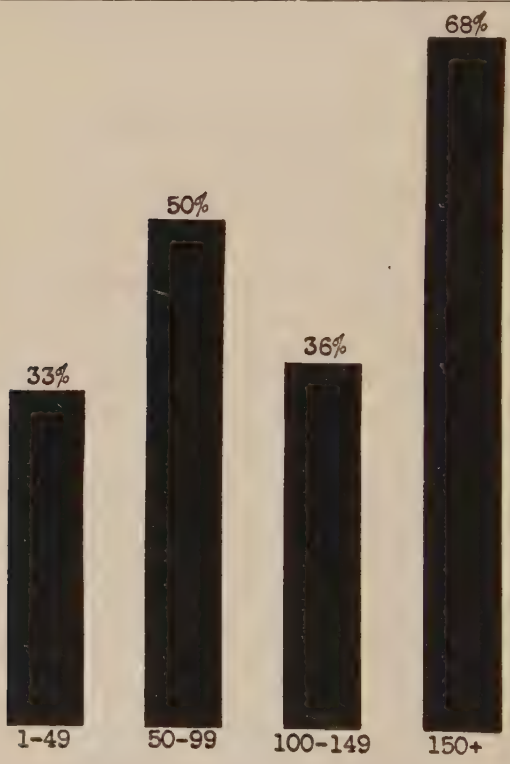

Diagram 9.—Percent of New York rural high schools of different types having the active coöperation of community organizations

Most Frequent Ways in which Community Organizations Assist the Schools

Prizes for school work	20
Providing playgrounds and equipment	14
School lunches	12
Lecture course and educational speakers	10
Health program	5
Better home conditions	4
School forum	9
Furnishing aid to needy children	4
Correcting attendance	4
Social entertainments for pupils and teachers	4
Visiting the school	5
Written reports on school work	2

Appeals Made by Principals of the Rural High Schools to Interest Pupils from Rural Schools in High School Education

A little over 52 percent of the principals of the schools studied report no definite effort to interest rural children in high school education, while about 47 percent use some plan for getting them to attend high school. Thirty-eight principals make personal calls upon pupils ready to enter high school and solicit them personally. Eleven principals report that they encourage prospective high school pupils from rural districts to visit their high school and see what it is like. Other principals mention various plans for interesting rural pupils in continuing their education in the high school. (See Table 35.)

Table 35.—Appeals Made by Principal of High School to Interest Pupils from Rural Schools in High School Education. (385 Principals)

Type of school	No appeal	Some form of appeal	Nature of the Appeal Made: Personal calls	Free tuition	Urge pupils to visit	Vocational courses	Visits, talks, parties	Canvass rural schools	Advocate benefit of education
1–49 less than 4 years	40	20	4	1	3	3	4	1	1
1– 49	85	69	14	3	5	1	1	..	18
50– 99	45	55	16	..	3	18	2	..	16
100–149	28	21	3	2	..	7	..	..	5
150–	13	9	1	..	..	3	..	3	3
Totals....	211	174	38	6	11	32	7	4	43

Note.—Three principals report that they mail handbooks of information on the high school offerings to prospective pupils; eight principals report use of the local paper to advertise high school education; five mention the Junior Project; two, high school exhibits; and seven, the influence of teachers and parents.

The Regents Examination System and the Administration of the New York Rural High School

One of the most important factors in determining the status of a high school in New York is its efficiency in bringing its pupils successfully through the Regents examinations. To be recognized as an accredited school and be eligible for State apportionments it must make use of the Regents academic examinations, at least in the last two years of the school's course. It may promote or graduate pupils on the basis of local standards, but such pupils do not receive the official recognition of the State. Quoting from Article 31 of the Regents rules: "Success in passing the Regents examinations shall not be deemed necessary for the promotion or graduation of pupils from schools that prefer to determine such advancements by their own local standards." This option in the Regents rules has had practically no bearing upon the rural high schools with their limited curricula and their need of maintaining work meeting the demands of the State Department as measured by the Regents examinations.

Undoubtedly it is highly desirable that a State should exercise its right to set up standards to be used as a basis for determining the status of secondary schools and for stimulating such schools to a better quality of work. It is not so clear, however, in the light of the comparative unreliability of any written test as a sole measure of a pupil's ability in a subject, that his success or failure over one or more year's work should be based entirely upon his showing in a written examination of an hour and a half or two hours in duration. Again it is more doubtful if the standardization of high school instruction should be sought largely through the pupil, especially when such a means acts directly to the disadvantage of the pupil who is so unfortunate as to be required to attend a high school in which the teaching staff is composed mainly of young, inexperienced, and poorly trained persons. Finally, if the present-day aims and objectives of the secondary school are accepted, it does not seem probable that the uniformity in subject matter necessarily resulting from State-wide uniform examinations is desirable.

A study of the failures in New York high schools over a period of twelve years, 1907–1918, shows: (1) that the standard of difficulty

in the Regents examinations in any high school subject fluctuates greatly from year to year, for it is not probable that the standard of instruction over the State as a whole varies to any appreciable extent from one year to the next; (2) that the standard as regards different subjects for any one year or period of years is exceedingly different; and (3) that the percentage of failures in New York high schools is far in excess of any legitimate percentage. Assuming that the subject-matter in the subjects taught in the high schools of the State is adapted to the capacities and maturity of its pupils and that the instruction is of average efficiency, it would seem that anything above seven to 10 percent in the number of failures should be looked upon as a matter of serious concern. Certainly, a consistent policy of failing over 25 percent of the pupils each year in the rural high schools of the State, over a period of twelve years, not counting at all the significant mortality of pupils not permitted by the local authorities to enter the examinations, must be regarded as opposed to all present-day ideals as to the aims and purposes of public secondary education. In connection with this heavy percentage of failure must be considered also the effect upon the problems of pupil elimination and retardation, the heavy burdens in expense and energy in carrying on instruction for repeating pupils, and most serious of all the factor of discouragement fostered by such a heavy toll in failures.

In the rural high schools the high percentage of failures among high school pupils brings in its train several very serious problems of administration and organization. In the first place the number of pupils failed in the Regents examinations does not give the complete story. Many pupils who have done the work in the subject throughout the year are not permitted to enter the examinations, so the total number failing is materially above the figures already given. Rural high school principals reported in many cases that they used a series of preliminary tests specifically designed to determine whether or not the pupils in any subject should be admitted to the Regents examinations. One principal, proud of the fact that his school had but a small number of papers returned each year, showed his record of his first year Latin class from which he

had already eliminated (April, 1921) 50 percent of those who began the year in that subject.

In rural high schools, particularly with an enrolment above 50, with an already overcrowded teaching schedule, it is commonly necessary year after year to maintain extra classes for repeating pupils in elementary algebra, elementary biology and less frequently in one or more of the other subjects. Such repeating classes seriously aggravate the already grave problems of inadequate room and teaching force. In smaller schools classes are much hampered by the large numbers of repeaters whose needs are hard to harmonize with the needs of those who are pursuing the subject for the first time.

The fact that the reports from the June Regents examinations are not in the hands of the high school principals before graduation day has brought into existence diverse modes of procedure in the rural high schools in the matter of graduation, some of them of questionable soundness. Furthermore, there is great lack of uniformity in requirements for graduation in the rural high schools. What would seem to be a questionable practice is that of permitting a pupil to go through the graduation exercises to receive an unsigned diploma which is never signed unless the report from the Regents examinations is satisfactory.

The following statements are typical as to the procedure followed in the rural high schools:

"Academic school diplomas are not granted until the final report of all Regents examinations is received, though some students have been allowed to go through the graduation exercises conditionally."

"Graduate conditionally and require Regents before the diploma is signed."

"Unsigned diplomas."

"Full Regents requirements for graduation must be met before school diplomas are granted."

Such conditions of uncertainty on the part of pupils graduating from high school at the time of graduation are to be deplored. If the policy of State examinations for promotion and graduation from rural high schools must be continued in New York, it is suggested either that the final examinations be given earlier in the year or that the marking of the local principal and teacher should be accepted for

the last semester. A pupil, it would appear, should know with reasonable certainty at least a month before graduation time whether or not his four years of work have been of a character to entitle him to a diploma recognized by the local school and by the State.[1]

In the Regents Rules, article 332 item (b), reads in regard to the minimum passing mark in Regents examinations:

"In all academic papers for credit toward an academic diploma, written by pupils who have given the required time to the study in recognized academic schools—60 percent," and item (d) reads, "In all academic papers written by pupils who have given the required time to the study, but *not* in recognized academic schools—75 percent."

Ruling (d) seems to be placing an unnecessarily heavy burden upon the pupil doing high school work in a small rural high school offering some high school subjects but not accredited. Such a pupil must pass the Regents examination in any secondary school subject with a standing 15 percent higher than that required of a pupil who has studied the same subject in an accredited high school. If the examination is a fair criterion for estimating a pupil's proficiency in a subject, as it apparently is considered, it would appear to be putting an undue burden upon the pupil who happens to be attending a small rural high school. It is asking him to attain a higher degree of proficiency than is demanded of a pupil presumably doing the work under the direction of a better teacher and with better equipment in a fully accredited high school.

As an administrative means for standardizing the rural high school work of New York the system of Regents examinations, at least as it now operates, seems to have few points in its favor. It tends to formalize high school instruction and over-emphasize mechanical drill and vague objectives. It hinders the development of high school work in the direction of pupil and community needs

[1] That this is a weakness in the present system of promotion and that it has been so recognized by the State department of education is shown by the fact that the Assistant Commissioner for Secondary Education, then the Head Inspector, called attention to it in his report of 1897. In this report he made recommendations looking toward the elimination in large part of this weakness in the system of promotion. See 1897 Report of the Department of Examinations, page 90.

and gives but little opportunity for initiative and independent thinking on the part of high school principals and teachers. It demands an unreasonable toll in failures from the high school population and tends to destroy interest and encourages elimination and retardation. It places an unnecessarily heavy financial burden upon the schools of the State because of the large numbers of repeaters and seriously augments the teaching load in the rural high schools. And finally it places the measure of success upon a basis which modern experimentation in education has proved unreliable and which is too narrow as the sole criterion of a pupil's ability. It arrives at all its results in the direction of high standards at the expense of the pupil and, finally, it seriously augments the administrative and instructional burdens of the rural high school.[1]

Buildings and Equipment of the Rural High School

An important factor in the efficiency of the work of a high school from its administrative side as it applies to the organization of the school and to the control of instruction is the high school building and its equipment. Poor arrangement and inadequate building and ground facilities hamper the principal and his corps of teachers in every direction. While there are some rural high school buildings in New York well designed to meet the demands of modern high school work, too large a percentage of them are ill fitted for the work necessarily undertaken in them.

For the efficient performance of his duties as a high school principal the principal requires an office. He must, if he is to keep informed as to the work of his school, have on file sufficient data in regard to courses of study, pupils, teachers, and the many activities of his school. This material should be where it is available and safe. He also needs as the director of his school a room where he may consult with patrons, pupils, and teachers (*without interruption*) on the various problems that invariably arise. The principal in the New York rural high school lacks this highly necessary room in over 50 percent of the high schools.

A part of a high school's equipment not so essential as the prin-

[1] For full discussion with statistics see Dr. Kruse's study, The State System of Examinations, Administration and Supervision.

cipal's office and yet a valuable feature of every high school is a teacher's room. Over 80 percent of the New York rural high schools are lacking in this respect.

It is fully recognized that one of the functions of the modern high school is health education. The Committee on the Reorganization of Secondary Education has placed health as one of the major aims of the secondary school. The realization of this aim requires both a gymnasium and playground space sufficiently ample in size for athletic fields. New York rural high schools were in the majority of instances constructed and located when knowledge of text-book material was regarded as the sole aim of the secondary school. As a result but few rural high schools are fitted to meet adequately the demands with regard to health education. Over 80 percent of the rural high schools have no gymnasium. Over 43 percent have a play area of less than one-half acre; over 24 percent have less than one-fourth acre, and five percent have no playground space at all. In many instances when the space is sufficiently large the ground is unfitted for playground and athletic fields.

With regard to school auditoriums, while some of the more recent high schools have good auditoriums or auditorium and study rooms combined, over 75 percent have no auditorium. With the increased attention to extra-class-room activities a school without an auditorium equipped with stage and curtains is seriously hampered in its work. It seems feasible also that the rural high school should become the center for many activities, including the community as well as the school population. It demands for any adequate realization of its functions a room equipped for accommodating its entire school population and the patrons of the school.

As concerns its work in the stricter sense, that of regular class-room instruction, the rural high school is inadequate. Twenty-one percent of the school buildings have but one class room in addition to the study room. This necessitates the teaching of a class each period of the day in a room where other pupils are studying. Fifty-three percent of the buildings have only two class rooms in addition to the study room.

The best type of high school education at the present time makes necessary much better facilities in the matter of library and labora-

tory. Without a good library for reference work and a laboratory equipped for demonstration and laboratory work in at least two sciences a high school cannot hope to give its pupils a high school education of a recognized standard. Instruction today in history, literature, the sciences, and to a lesser degree in the other subjects finds a good library essential. Science instruction should center around the laboratory. Practically all rural high schools have both libraries and laboratories, but too frequently they are poorly equipped, poorly arranged and inconveniently situated. The median score of the New York rural high school library, not including its equipment of books and magazines, is approximately 5 of a possible 10; and the median score of the laboratory is 13 on the basis of a possible 20. In other words, the library and laboratory equipment, not including books, magazines or apparatus, is a little more than half what it should be if the rural high school pupil is to have advantages comparable to those of the pupil in city high schools in the phases of high school work dependent upon the library and the science laboratory.

Finally all facts indicate that the administrator of the rural high school labors at a great disadvantage in his attempts to give to his community the results from its school system that it should get. Close attention should be given in the future development of the rural high school to those factors of building and physical equipment that are essential to the realization of an efficient high school.

* For a detailed statistical study see Dr. Butterworth: School Buildings and Grounds.

CHAPTER IV

RECOMMENDATIONS FOR THE IMPROVEMENT OF THE NEW YORK RURAL HIGH SCHOOL WITH RESPECT TO ITS ADMINISTRATION AND SUPERVISION

I. General Recommendations

1. Every phase of the study of the New York rural high school emphasizes the need of well-defined objectives. While individual principals and teachers are doing excellent work, in general there is a very evident vagueness as to the ends to be sought. With the exception of the one predominant idea, constantly in the minds of practically all principals and teachers, that they must prepare their pupils to pass the Regents examinations, there is a lack of clarity as to the functions of secondary education in rural communities and as to the organization adapted to realizing these functions. The relations of the principal to the school board, to the community in which he serves, to his teaching staff, and to the pupils, are in no way sufficiently determined. His powers with regard to the curriculum and courses of study in his school are meagre and vague. His duties and powers as the local executive officer and the supervisor of instruction are indefinite.

In view of these facts it is recommended that steps be taken to set up as clearly and specifically as possible tentative objectives as to the functions of rural secondary education and as to the duties and responsibilities of the several agencies and individuals working toward their realization. It is also recommended that a body be formed of persons fitted to undertake such a responsibility, by reason of their interest in and acquaintance with the problems of rural secondary education, to work in the direction of establishing func-

tional objectives for the rural high school and for ensuring changes as the needs of the future may require.

2. Without specific agencies for keeping before high school principals in the rural high schools the latest ideas and means for improving their work, the preceding recommendation could not be effective. It would be necessary to bring principals and teachers in service in touch with developments in administration, supervision, and instruction. It would seem advisable to make more specific provision for the consideration of rural high school problems through such existing agencies as the State Teachers' Association and the various local and regional teachers' organizations. These, however, should be supplemented by agencies to be devised specifically for the training of rural high school principals and teachers in service.[1]

II. The High School Principal

At the present time the work of the principal in the rural high school, if judged by the distribution of his time, is primarily that of a class-room instructor. While nominally he is the executive head of the school and the supervisor of instruction, both in the high school and the elementary grades, in practice he is given but little time for the many responsibilities that should belong to his position. He has no well-defined powers as the head of his school. As a result of the vagueness and indefiniteness of his position, he is often unable to initiate or to put into practice plans for increasing the efficiency of his school. In view of the present indefinite status of the rural high school principal, it is recommended that:

1. There be set up more specific definitions as to the rural high school principal's duties, powers, and responsibilities for the various classes of rural high schools, classification being made on the basis of number of pupils enrolled in the high school and in the elementary grades, where he is also in charge of elementary instruction:

(*a*) as the executive officer of the local school board;

(*b*) as the supervisor of class-room instruction;

(*c*) as the director of the internal organization of the school;

[1] For more complete recommendations see Chapter V, The Teaching Staff, Article III of recommendations.

(*d*) as to his powers and responsibilities in relation to the high school curricula and courses of study;

(*e*) as to the maximum amount of time to be given to class-room instruction in the several classes of schools;

(*f*) as to the minimum amount of time to be given to supervision of instruction in the several classes of schools.

(*g*) as to powers and responsibilities in relation to pupils and pupil activities.

III. The High School Teacher

With regard to the status of the teacher in the rural high school there is need of specific definitions as to his duties and responsibilities: The following recommendations are made:

1. That there be set up definite standards as to the maximum amount of teaching to be permitted, in terms of recitation periods, a teacher in a standard or accredited rural high school.

2. That there be formulated a clearer definition as to the relation of the teacher to the administrative and supervisory head of the school.

3. That where the high school principal is also principal of the elementary grades, recommendation (2) be also interpreted to apply to the teacher in the elementary grades. This recommendation is made because of the lack of understanding in many of the smaller schools as to the relation of the teacher of the elementary grades to the high school principal.

IV. Flexibility in the Administration of High School Curricula and Courses of Study

One of the problems of utmost importance in the rural high school from the administrative standpoint springs from the comparative rigidity of its curriculum. The Regents requirements for an academic diploma are comparatively flexible. In practice, however, the emphasis placed upon certain groups of subjects, as the languages and mathematics, through the requirements for State scholarships, college entrance certificates, and suggested programs of studies for small high schools, have tended to limit the curricula of these schools to the older, more formal subjects. There is a serious question, in the light of the demands made upon the modern secondary school

and the needs of modern life, as to the relative values of the subjects offered in the majority of rural high schools. If the high school is to meet the needs of the greatest number of its pupils, it would seem that the local high school should be encouraged to develop curricula adapted to its needs and given greater freedom in determining its curricula and courses of study.

1. It is recommended that there be a limitation in the matter of State requirements in the rural high schools in required subjects and in the subject-matter of courses of study to minimum essentials in subjects vital to State and national citizenship and health, thus giving opportunity for greater initiative and freedom to local high schools in offering high school work meeting specific local needs and the major demands of the pupils enrolled.

2. It is also recommended that all subjects of high school grade and taught by a qualified teacher be given equal recognition toward a diploma recognized by the State, provided that the State requirements in recommendation (1) be met, and provided there has been continuity in the curriculum followed by the pupil.

V. Junior High Schools

The organization of secondary education with the Junior high school as the first unit should be of great value in New York. It is suited particularly to offer the rural pupil the opportunity of richer and more varied subject-matter two years earlier than is at present possible. It should bring closer together the elementary school and the high school and operate to reduce the elimination of rural pupils before reaching the high school. It should make high school education more available to rural pupils in many communities by permitting the organization of a Junior high school where the community is too small to maintain a four year high school. In these smaller communities it would bring together a body of pupils large enough to make possible a better corps of teachers:

1. It is recommended that steps be taken to bring about the organization of Junior high schools in rural and village communities, to encourage their development through State aid on the same basis as for the regular high school, and also making provision for a committee for the formulation of suitable objectives, of suggestive

curricula and courses of study suited to the maturity and needs of pupils of junior high school age, and with provisions for flexibility to meet the varied local needs and demands inevitable in a state like New York.

VI. Inspections

In a state the size of New York it seems impracticable for the State Department of Education to attempt the supervision of the high schools of the State. In the first place it cannot keep closely enough in touch with the local teachers to be in a position to understand their weaknesses and strengths, the necessary basis for constructive supervision. In the second place it cannot know the local problems and conditions peculiar to communities. In the third place it is not economical either of time or money for all supervisors to go out from the State office to all parts of the State. Finally, granting that the factor of distance could be overcome, the burden of efficient supervision would be so great as to require an unwieldy central organization.

It is necessary, however, that the State exercise some control over the local high schools. It is necessary that it act as a standardizing agent in some definite way. Because of its relation to all the schools of the State and because of its powers with respect to standards of work and of high school teachers the State Department of Education should function as an inspectorial agent but should not attempt supervision except as an incident of inspection.

1. It is recommended that the State Examinations and Inspections Division limit its function as regards the rural high schools to that of inspection only.

VII. Supervision

One of the most outstanding needs of the New York rural high school is that of supervision of class-room instruction. There is also needed to almost an equal degree supervision of school organization and the broader and more comprehensive phases of the work of the local school. At the present time the State Examinations and Inspections Division is unable to visit many of the rural high schools even once a year, as indicated by the fact that for the year 1920–21 the inspection of more than 100 schools was delegated to

the district superintendent. The district superintendents in the majority of instances, with the exception of the smaller rural high schools, have confined their attention mainly to the one-teacher rural schools and to the elementary grades. The high school principal (see Table 11) has been engaged mainly in class-room instruction except in the larger schools. As a result one of the most important means of improving the quality of work done in the rural high school is very inadequate.

Sympathetic, genuinely constructive supervision, which will operate to improve the individual teacher in service and which will also bring to the local principal a viewpoint broader and deeper than is possible in his limited field of experience, and which at the same time will be close enough to evaluate intelligently the local problems, is one of the great needs of the rural high schools in New York.

To meet these needs the following recommendations are made for improving the supervision of the rural high school:

1. That requirements be made upon the local principal for a definite portion of his time, to vary with the size of his school, to be devoted to supervision, and that to ensure him the necessary time his work as a teacher be limited.

2. That the superintendent of the intermediate educational administrative unit have as one of his duties the supervision of class-room instruction and school organization in the high schools within his district. With the provision that where the number of schools becomes too large or where the superintendent of the intermediate unit has his time fully taken up by his administrative duties, he shall be given the authority to appoint, subject to the approval of his board and according to the standards of qualification of the State Education Department, a supervisor of secondary education for that administrative unit.

VIII. Buildings and Equipment

A school building, its equipment and grounds should be of such a character as to offer the most effective and economical physical surroundings for the realization of the objectives of the school. A high school building should be so constructed and ordered as to

meet in an economical way all the demands of high school education. The equipment should be sufficient to meet the demands for efficient work in the various phases of high school instruction, both class-room and extra-class-room in type. The grounds should be ample for meeting the demands upon the modern high school in its work in physical education and training in habits of outdoor recreation. Measured in view of these requirements, New York rural high school buildings and their equipment and grounds are in the main far from satisfactory. Some of the schools measure up to the standard and others fall short in certain particular details. The average of all the rural high schools is below any reasonable standard:

1. It is recommended that more specific requirements be set up as to rural high school buildings and that adequate building, equipment and grounds for meeting the demands of secondary education be required for the accrediting of a high school.

2. It is recommended that the nature of the equipment, particularly as referring to laboratory and library, its value for the work which the school does, be the basis of standardization rather than the total money value of the equipment, the present basis of accrediting the high school.

IX. Extra-Class-Room Activities

One of the most striking characteristics of the New York rural high schools is the comparative lack of attention given to pupil activities, both of a purely social nature and of a type primarily educational. In the schools where they are found such activities are usually regarded as extraneous to the real work of the school. While the nature of these activities, particularly those of a type mainly educational, is a curriculum problem, the manner of their control and organization and their relation to the other work of the school is a problem of administration.

Because of the important place which extra-class-room activities are taking in the modern high school, and especially because of their value for pupils from rural communities in affording them actual practice in coöperative group activities, and finally, because of their value in building up a desirable school spirit and interest in the school, it is recommended:

1. That attention be given to this phase of rural high school work, and

2. That guidance be given high school principals and teachers in rural high schools as to practicable ways of organizing the schools so that this phase of high school work may be given a place as an integral part of the program of the school.

X. Pupil Guidance and Supervised Study

In New York rural high schools a comparatively small percentage have any definite organization either in the direction of offering guidance to pupils in their school work and life plans or in study under the supervision of the instructor. Because of the need of the former and the value of the latter, particularly for pupils beginning high school work, it is recommended that consideration be given to these problems of high school organization for the purpose of devising means for meeting them more effectively in rural high schools.

XI. Financing the Rural High Schools

The study of the financial support of the rural high school shows that under the existing system there is great variability in the burden borne by different high school communities. Some communities are assuming a financial burden for the support of their local high school that is excessive. Other communities with far greater taxable wealth and with relatively small high school populations are able to bear the burden of their high school with ease. This lack of equality in the financial burden of secondary education is due largely to the small proportion of the cost borne by the State. (For full discussion, see Dr. Updegraff's study.) To equalize the cost of rural secondary education in New York, it is recommended:

1. That the taxation unit for the support of rural secondary education be made large enough to include several high school districts.

2. That in the distribution of State aid to rural high schools there should be a recognition of the principles set forth in Dr. Updegraff's

study of school support. In general this would mean that a larger proportion of the cost of rural secondary education be borne by the State than at present.

XII. The Standardization of the Rural High School

From every angle of approach the most important factor in the standardization of the New York rural high school is the system of Regents examinations. It colors every problem of administration and organization in the rural high school. It operates toward the formalization of all work. While public secondary education should select by differentiation among pupils, it emphasizes selection by elimination. Finally, the whole scheme of standardization of the rural high school of New York places the burden primarily upon the pupil.

It is recommended:

1. That there be formulated a plan for standardizing the rural high schools of New York, throwing the burden upon the State and the community: (a) through higher qualifications for high school principals and teachers and teaching means; (b) through more responsibility upon local principals and teachers for the promotion of high school pupils; and (c) through closer supervision of the work of the individual teacher.

2. That less emphasis be placed upon the Regents examinations as an administrative means for holding schools up to the standard, and greater emphasis upon the qualifications and professional training of the high school principal and teacher and upon instructional equipment, and through more reliance upon helpful supervision. This would tend to develop a more reliant and resourceful body of high school principals and teachers in the rural high schools. At the present time the school's success in the Regents examinations as the measure of the school's efficiency puts an undue burden at all stages upon the pupil who is compelled to get his high school education in the smaller high schools under less efficient teaching and with meager instructional materials. It also makes the objectives of the instruction in the rural high schools the passing of examinations and destroys flexibility and vitality of instruction and compels undesirable uniformity.

3. That more weight be given to the high school pupil's daily work as a criterion for promotion, thus encouraging consistent continued effort upon the part of the pupil and discouraging the forced cramming of the last month of each half year.

4. That for pupils in the fourth year of the high school, and expecting to be graduated, the work of the last term be accepted by the State on the basis of the pupil's ratings by the local teachers and principal. This recommendation is made because of the injustice to high school boys and girls who in many rural high schools are permitted to go through the graduation exercises only to be refused a diploma later through the return of one or more papers from the State Department.

PART II

THE TEACHING STAFF; CLASS-ROOM INSTRUCTION; AND THE CURRICULUM

CHAPTER V

THE TEACHING STAFF

The Basis of the Study

THE study of the teaching staff of the rural high school is based in the main upon data from 416 principals and teachers composing the teaching corps of 123 rural high schools. Of the 416 who gave practically complete reports, 123 were principals and 293 were teachers. Forty-three counties are represented in the returns. While the data are from approximately only one-sixth of the rural high school principals and teachers in the State, they represent a large proportion of the counties and all types of rural high schools on the basis of number of pupils enrolled. Consequently, it is assumed that things true of the principals and teachers for whom data are at hand are true with respect to the high school teaching staff of all the rural high schools of the State. The soundness of this assumption in this case is supported by the fact that 63 questionnaires received after the first 353 had been tabulated resulted in no material change in any item. The assumption is further strengthened by the fact that the data with regard to the academic training of the 416 principals and teachers studied are in close agreement with the data on the academic training of 2387 principals and teachers of the rural high schools in 1919–20.

The distribution of the 416 teachers as to counties is as follows:

Albany	5	Fulton	8	Otsego	7
Allegany	5	Genesee	5	Putnam	5
Broome	13	Hamilton	10	Rensselaer	2
Cattaraugus	9	Herkimer	8	Rockland	17
Cayuga	7	Jefferson	8	St. Lawrence	9
Chautauqua	2	Lewis	8	Saratoga	12
Chemung	2	Livingston	11	Steuben	18
Chenango	4	Madison	12	Suffolk	28
Clinton	3	Niagara	20	Tioga	8
Columbia	10	Oneida	8	Ulster	6
Delaware	32	Onondaga	10	Warren	6
Dutchess	15	Ontario	12	Washington	9
Essex	12	Orange	8	Wayne	2
Franklin	25	Oswego	8	Wyoming	7

Age

The median age of the rural high school principals is 33.5 years. Practically one-fourth are 28 years old or younger and one-fourth are over 43. For teachers the median age is 26.2 years. One-fourth are 24 years old or younger and one-fourth are 31 or over. For both principals and teachers, the median age is 27.8 years. One-fourth are 24.5 years old or younger and one-fourth are 36 years of age or older. Comparing the rural high school teaching staff as a whole with elementary teachers in village schools of the State shows that the median age is approximately a half year less than that of the elementary teachers in village schools. Compared with the elementary teachers in forty New York cities of the third class, the median age of the high school staff is found to be more than a year (1.2) less.[1] As a whole, 35.5 percent of the rural high school staff are between the ages of 20 and 25 as compared with 26.5 percent of the academic teachers in the high schools accredited by the North Central Association; 62.2 percent are between the ages of 20 and 30, as compared with 53.8 percent for the teachers in the high schools accredited by the association.[2] Excluding the principals, the median age of the rural high school teacher is two and a fourth years less than that of the elementary teacher in village schools and almost three (2.8) years less than that of the elementary teachers in the forty New York cities. All data indicate that a

[1] See Dr. Bagley's study: Teachers and Teacher Preparation.

[2] Proceedings of the Twenty-Seventh Annual Meeting of the North Central Association of Colleges and Secondary Schools. Part I, 1922.

TABLE 36.—AGE AT NEAREST BIRTHDAY

Age	Principals	Teachers	Total	Percent principals	Percent teachers	Percent total
20	..	1	1	..	0.3	0.2
21	..	6	6	..	2.0	1.4
22	..	27	27	..	9.2	6.5
23	4	47	51	3.3	16.0	12.2
24	3	34	37	2.4	11.6	8.9
25	1	26	27	0.8	8.9	6.5
26	14	25	39	11.4	8.5	9.4
27	5	18	23	4.0	6.1	5.5
28	8	11	19	6.5	3.8	4.6
29	8	8	16	6.5	2.7	3.8
30	6	8	14	4.9	2.7	3.4
31	6	10	16	4.9	3.4	3.8
32	5	2	7	4.0	0.7	1.7
33	3	5	8	2.4	1.7	1.9
34	5	9	14	4.0	3.1	3.4
35	4	3	7	3.2	1.0	1.7
36–40	13	22	35	10.6	7.5	8.4
41–45	15	11	26	12.2	3.8	6.3
46–50	9	11	20	7.3	3.8	4.8
51–55	9	5	14	7.3	1.7	3.4
56–60	3	2	5	2.4	0.7	1.2
61 and above	2	1	3	1.6	0.3	0.7
Not reported....	..	1	1	..	0.3	0.2
Median age...	33.5	26.2	27.8	..	..	..
First quartile..	28.5	23.8	24.5	..	..	..
Third quartile.	43.4	31.3	35.9	..	..	..

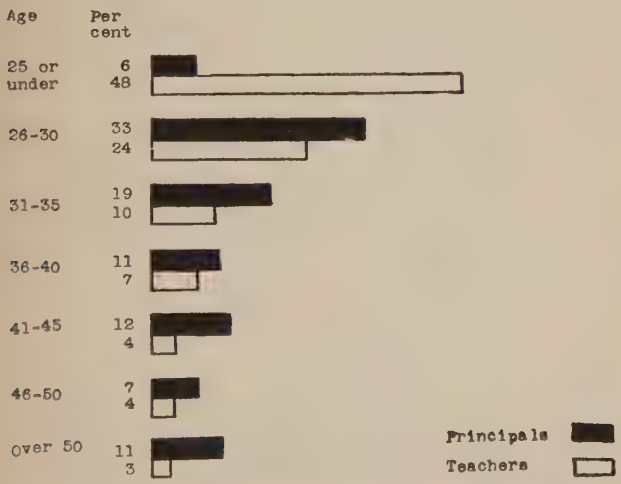

Diagram 10.—Age of rural high school teaching staff

large proportion of the teaching staff of the rural high school is young and immature as compared with the teachers in other types of schools. (Table 36.)

Sex

Approximately 70 percent of the teaching staff in the New York rural high schools are women and 30 percent are men.[1] Of the principals, 81 per cent are men and 19 percent are women. Exclusive of principals, 91 percent of the teachers are women. Considering the rural high school staff as a whole, the number of men is four less for each one hundred teachers than it was for village and rural high schools of the United States in 1917–18, as reported by the United States Bureau of Education, or than it was for 25 city high schools in New York State in 1920–21.

Table 37.—Sex of Teaching Staff

Sex	Male	Female	Percent male	Percent female
Principals	100	23	81.3	18.7
Teachers	26	267	8.9	91.1
Total	126	290	30.3	69.7

Married or Single

Approximately 65 percent of the principals are married and 35 percent single. Eleven percent of the teachers are married and 89 percent unmarried. Of the teaching staff as a whole, approximately 27 percent are married and 73 percent unmarried.

Table 38.—Number and Percent of Teaching Staff Married or Single

	Married	Single	Not reported	Percent married	Percent single	Percent not reported
Principals	79	43	1	64.2	34.9	0.8
Teachers	33	259	1	11.3	88.4	0.3
Total	112	302	2	26.9	72.6	0.4

Early Environment

From the standpoint of an understanding of the rural high school and its problems the early environment of the principal or teacher

[1] This shows a larger proportion of men by approximately three percent than is shown by the reports of 405 principals of rural high schools as to number and sex of the high school staff in their schools in 1920–21.

is undoubtedly a factor to be considered. Teachers with a background of rural experience should be better acquainted with rural life, its educational resources, and its problems and as a result be better able to relate the school work to the lives of the pupils and to the community. Of the rural high school principals, over 55 percent were born and spent their early life in the open country. A fraction over 33 percent were born in a village, and between 10 and 11 percent in the city. Of the teachers, 25.6 percent were born and spent their early life in the open country; almost 46 percent were born in a village; and 28.6 percent in the city. In the case of both principals and teachers a small number of those born in city or village spent their early life in the open country. Taking the teaching staff as a whole, the facts at hand indicate that approximately 35 percent come from the open country, 42 percent from villages, and 23 percent from cities. The data show also that a much larger proportion of those holding principalship positions, generally men, come from the open country than of the assistants, of whom 91 percent are women. The majority of the men in the rural high schools are recruited from the open country while the villages furnish the largest proportion of women.

TABLE 39.—EARLY ENVIRONMENT OF THE TEACHING STAFF

	City		Born in city; early life spent in open country		Village		Born in village; early life spent in open country		Open country		Not given	
	No.	Per-cent	No.	Per-cent	No.	Per-cent	No.	Per-cent	No.	Per-cent	No.	Per-cent
Principals	12	10.5	1	0.8	37	33.3	4	3.2	68	55.3	1	0.8
Teachers..	80	28.6	4	1.7	124	45.7	10	3.4	75	25.6	..	..
Total...	92	23.3	5	1.2	161	42.1	14	3.3	143	34.4	1	0.2

Place of Birth

A very large proportion of the rural high school teaching staff is native to the State. The data show that approximately 84 percent of the principals and 82 percent of the teachers were born in New York State. Of the principals, a fraction less than 15 percent, and of the teachers approximately 17 percent, 16 percent for both, were born in other states. Less than one and a half (1.4) percent of the rural high school staff were foreign born.

Table 40.—Place of Birth of Rural High School Instructors

Place of birth	Principals	Teachers	Total
New York	103	240	343
Pennsylvania	10	12	22
Vermont	2	10	12
Massachusetts	2	8	10
New Hampshire	..	2	2
Connecticut	..	2	2
New Jersey	3	..	3
Kansas	..	2	2
Minnesota	..	2	2
Other States	1	11	12
Foreign countries	2	4	6
Percent born in New York	83.7	81.9	82.5
Percent born in other States	14.6	16.7	16.1
Percent born in foreign countries	1.6	1.3	1.4

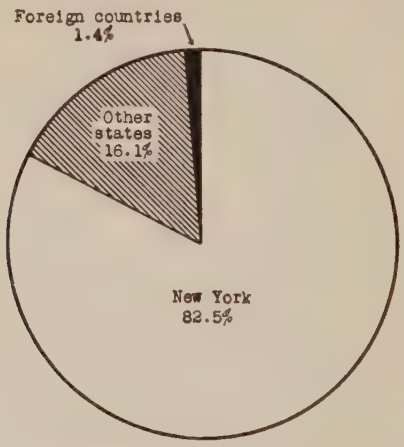

Diagram 11.—Place of birth of principals and teachers

TABLE 41.—NATIONALITY OF PARENTS

	(a) Nationality of father							Percentage						
	American	Irish	German	English	Canadian	Other nationalities	Not reported	American	Irish	German	English	Canadian	Other nationalities	Not reported
Principals	109	4	3	3	1	3	..	88.6	3.2	2.4	2.4	0.8	2.4	..
Teachers	260	7	8	4	5	9	..	88.7	2.4	2.7	1.3	1.7	3.0	..
Total	369	11	11	7	6	12	..	88.7	2.6	2.6	1.7	1.4	2.8	..

	(b) Nationality of mother							Percentage						
	American	Irish	German	English	Canadian	Other nationalities	Not reported	American	Irish	German	English	Canadian	Other nationalities	Not reported
Principals	108	5	1	3	2	1	3	87.8	4.0	0.8	2.4	1.6	0.8	2.4
Teachers	257	9	7	3	3	7	7	87.7	3.0	2.4	1.0	1.0	2.4	2.4
Total	365	14	8	6	5	8	10	87.7	3.3	1.9	1.4	1.2	1.9	2.4

Nationality

With respect to nationality, the teachers in rural high schools are predominantly of American stock. Approximately 86 percent of the principals and teachers have parents both of American birth. In 88.7 percent of the cases the father was born in the United States and the mother in 87.7 percent. (See Table 41.)

Occupational Groups Furnishing the Rural High School Teachers

With regard to the occupations of the father practically 97 percent of the principals and 86 percent of the teachers gave the desired information. Of the principals reporting, 56.3 percent gave farming as the occupation of the father; 14.3 percent gave business; and 15.1 percent gave various callings of the artisan type. In 7.6 percent of the cases the father followed one of the professions, in five percent his work was under the civil service, and in 1.7 percent he was a laborer.

Of the teachers reporting, 38.2 percent gave farming as the father's occupation; 29.9 percent gave business; and 16.7 gave callings of the artisan type. The father followed a profession in the case of 11.6 percent of the teachers reporting. In 2.4 percent of the cases he was a laborer and in 1.2 percent he was working under the civil service. The data indicate that the teaching staff of the rural high school is recruited largely from the four general occupational groups

Table 42.—Occupation of the Father

Occupation	Farming	Business	Artisan trade	Profession	Civil service	Laborer	Not reported
Principals	67	17	18	9	6	2	4
Teachers	96	75	42	29	3	6	42
Total	163	92	60	38	9	8	46
Percent principals[1]	56.3	14.3	15.1	7.6	5.0	1.7	3.2
Percent teachers	38.2	29.9	16.7	11.6	1.2	2.4	14.3
Percent total	44.1	24.9	16.2	10.2	2.4	2.2	11.0

[1] The percentages in Table 42 are computed on the basis of the number reporting, and in Diagram 12 on the basis of total number studied.

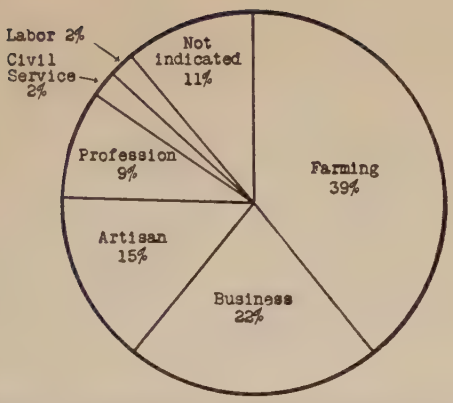

Diagram 12.—Occupations of fathers of principals and teachers

engaged in farming, business, work of the artisan type, and the professions.

Parental Income

To the question as to parental income, approximately 58 percent of the principals and teachers gave a definite answer. Many others reported it impossible to make an accurate estimate. While the proportion of teachers supplying data with regard to this item is

Table 43.—Annual Parental Income

Annual income	Principals	Teachers	Total	Percent of total
Living	3	11	14	5.9[1]
$500 or less	16	13	29	12.1
501–750	11	11	22	9.2
751–1,000	15	23	38	15.9
1,001–1,250	21	27	48	20.0
1,251–1,500	4	1	5	2.1
1,501–1,750	1	1	2	0.8
1,751–2,000	11	44	55	23.0
2,001–2,500	1	..	1	0.4
2,501–3,000	6	9	15	6.3
3,001–4,000	..	1	1	0.4
4,001–5,000	1	2	3	1.3
5,001 or over	1	5	6	2.5
Number reporting	91	148	239	57.5
Number not reporting	32	145	177	42.5
Approximate median	$1,000	$1,140	$1,100	..

[1] The percentages are computed on the basis of the number reporting.

TABLE 44.—TYPE OF FAMILY, ON THE BASIS OF SIZE, FURNISHING THE TEACHER OF THE RURAL HIGH SCHOOL

(a) Number of Children in the Family

Number of children	1	2	3	4	5	6	7	8	9	10	Not reported	Median	First quartile	Third quartile
Principals	14	17	28	29	13	8	8	3	1	2	..	4.1	3.0	5.3
Teachers	46	61	66	44	27	17	13	6	6	5	2	3.6	2.4	5.0
Total	60	78	94	73	40	25	21	9	7	7	2	3.7	2.5	5.1
Percent of total	14.4	18.6	22.6	17.5	9.6	6.0	5.0	2.2	1.7	1.7	0.5	..	..	..

(b) Number of Brothers

Number of brothers	0	1	2	3	4	5	6	7	Not reported	Median	First quartile	Third quartile
Principals	23	43	27	18	8	2	1	..	1	1.9	1.2	2.9
Teachers	86	102	50	30	11	7	3	1	3	1.5	0.8	2.6
Total	109	145	77	48	19	9	4	1	4	1.7	0.9	2.7
Percent of total	26.2	34.8	18.5	11.5	4.6	2.2	0.9	0.2	0.9	..	..	..

(c) Number of Sisters

Number of sisters	0	1	2	3	4	5	6	7	Not reported	Median	First quartile	Third quartile
Principals	47	30	23	13	3	2	4	..	1	1.5	0.6	2.6
Teachers	112	89	47	16	16	7	2	1	3	1.4	0.6	2.3
Total	159	119	70	29	19	9	6	1	4	1.4	0.6	2.4
Percent of total	38.2	28.6	16.8	7.0	4.6	2.2	1.4	0.2	1.0	..	..	..

(d) The Oldest or Second Oldest Child in the Family

	Oldest child	Second oldest
Principals	45	26
Teachers	102	73
Total	147	99
Percent of total	35.3	23.8

comparatively small, it is good considering the difficulties involved and the percentage of replies given to this item in similar studies that have been made. The data given indicate that the median annual income of the families from which the rural high school teachers come was at the time they began teaching approximately $1100, while one-fourth come from families having an income of approximately $1900 or more. In only 10 percent of the cases reporting was the estimated annual income more than $2500. In general it would seem that the rural high school teacher comes from a family of moderate financial circumstances.

Size of Family

In general the members of the rural high school teaching staff come from families of more than average size, as shown by the statistics either for New York State or for the United States as a whole. The median number of children for each family is approximately four (3.7). In one-fourth of the families there are fewer than three children and in one-fourth five or more. In 14.4 percent of the cases or in one case in 7 the teacher reporting is the only child "in the family," in 35.3 percent he is the oldest child, and in 23.8 percent the second oldest. (See Table 44.)

Academic and Professional Training

As to academic training, 56.9 percent of the 123 principals are college graduates. In addition to a college course 5.7 percent have devoted from one to three years to graduate work. Almost 11 percent have given from one to four years to college preparation. Excluding those who have also done some college work, 17.9 percent are graduates of normal schools, and an additional 3.2 percent have taken one or two years of normal school training. With graduation from high school or high school plus one year in a high school training class as their maximum amount of regular academic training, there are 10.5 percent of the principals. Approximately one percent have had less regular academic training than a four year high school course.

The proportion of teachers having college degrees is somewhat higher than it is in the case of the principals. Of the 293 teachers

reporting, 64.2 percent are college graduates.[1] One and three-tenths percent have done one year of graduate work. Nearly nine percent have completed from one to four years of college work. Excluding those who have also done some college work, 19.1 percent are normal school graduates, and another 1.7 percent have spent from one to two years in a normal school. Approximately six percent have had no regular academic training beyond that represented by a four year high school course or high school plus a year in a high school training class.

Combining the data on the academic training for principals and teachers gives the following results: Sixty-two percent of the rural high school staff are college graduates and an additional 9.3 percent have had one or more years of college training. Excluding those who have also had some college work but are not graduates of college, 18.8 percent are normal school graduates and an additional 2.1 percent have given one or two years to a normal school training. The remaining 7.7 percent have had high school training or high school plus one year in a high school training class. (Table 45.) That these figures represent the status of the rural high school staff with respect to academic training is borne out by the data from 2,387 rural high

TABLE 45.—ACADEMIC AND PROFESSIONAL TRAINING

	High school			Normal school			College					Graduate work		
	Three years	Graduated	Training class	One year	Two years	Graduated	One year	Two years	Three years	Four years	Graduated	One year	Two years	Three years
Principals	1	7	6	3	1	22	3	7	3	..	70	5	..	2
Teachers	1	8	9	3	2	56	10	5	7	4	188	4	..	..
Total	2	15	15	6	3	78	13	12	10	4	258	9	..	2
Percent principals	0.8	5.7	4.8	2.4	0.8	17.9	2.4	5.7	2.4	..	56.9	4.1	..	1.6
Percent teachers	0.3	2.7	3.1	1.0	0.6	19.1	3.4	1.7	2.4	1.3	64.2	1.3	..	..
Percent total	0.5	3.6	3.6	1.4	0.7	18.8	3.1	2.9	2.4	0.9	62.0	2.2	..	0.5

[1] Principals and teachers having done graduate work are also included in the number of those who are college graduates.

school principals and teachers of the State in 1919–20. Of the 2,387, 63.3 percent were college graduates, 25.8 percent were normal school graduates, and 10.9 percent were not graduates from either normal school or college. (Table 45A.) If in the case of the 416 instructors, the basis of the present study, the percentage of normal graduates who have done one or more years of college work, were added to the percentage given for normal graduates, the data for the two groups would agree closely throughout.

TABLE 45A.—ACADEMIC TRAINING OF 2,387 RURAL HIGH SCHOOL PRINCIPALS AND TEACHERS OF THE STATE (1919–20)

	Not graduates from normal school or college	Normal school graduates	College graduates	Total
Number	259	617	1,511	2,387
Percent	10.9	25.8	63.3	100.0

TYPE OF CERTIFICATE HELD

Of the principals, 54.4 percent hold some form of State certificate requiring as a minimum of preparation graduation from college. The remaining 2.5 percent who are college graduates hold normal or temporary certificates. Twenty-one and one-tenth percent hold

TABLE 46.—TYPE OF CERTIFICATE HELD

Type of certificate	Principals	Teachers	Total	Percent principals	Percent teachers	Percent total
College graduate	academic 65	179	244	52.8	61.1	58.9
	special 2	9	11	1.6	3.1	2.6
Normal certificate	26	56	82	21.1	19.1	19.7
State certificate[1]	19	25	44	15.4	8.5	10.6
Special[1]	..	3	3	..	1.0	0.7
Equivalent	1	..	1	0.8	..	0.2
First grade	5	11	16	4.1	3.7	3.8
Training class	2	1	3	1.6	0.3	0.7
Temporary	2	8	10	1.6	2.7	2.4
Rural renewable	1	..	1	0.8	..	0.2
Special permit	..	1	1	..	0.3	0.2

[1] Not based upon graduation from college.

normal school certificates; 15.4 percent hold State certificates, either life or limited; 5.7 percent hold first grade or training class certificates. The remaining 3.2 percent are teaching under equivalent, temporary, and rural school renewable certificates.

Of the teachers, 64.2 percent hold a college graduate certificate, academic or special. Nineteen and one-tenth percent teach under normal school certificates, 8.5 percent under a State certificate, either life or limited; approximately one percent hold a special certificate, not based on graduation from college. Three percent hold temporary certificates or special permits; and four percent have first grade or training class certificates.

Age at Which Instructors Begin Teaching

The data from the group studied indicate that one half of the principals of the rural high schools begin teaching at 21 years of age or younger; one-fourth at 19 or younger, and one-fourth at 23

Table 47.—Age at which Rural High School Instructors Begin Teaching

Age	Principals	Teachers	Total	Percent principals	Percent teachers	Percent total
15	1	2	3	0.8	0.7	0.7
16	6	3	9	4.9	1.0	2.2
17	4	2	6	3.2	0.7	1.4
18	23	29	52	18.7	9.9	12.5
19	7	32	39	5.7	10.9	9.4
20	15	35	50	12.2	11.9	12.0
21	14	55	69	11.4	18.8	16.6
22	12	73	85	9.8	25.0	20.4
23	12	36	48	9.8	12.3	11.5
24	8	15	23	6.5	5.1	5.5
25	10	4	14	8.3	1.4	3.4
26	1	2	3	0.8	0.7	0.7
27	1	1	2	0.8	0.3	0.5
28	1	1	2	0.8	0.3	0.5
29	2	1	3	1.6	0.3	0.7
30	1	1	2	0.8	0.3	0.5
31–35	..	..	..	..	..	..
36–40	..	1	1	..	0.3	0.2
41–45	1	..	1	0.8	..	0.2
Not reported	4	..	4	3.2	..	1.0
Median age	21.2	21.7	21.6	..	..	..
First quartile	18.8	20.1	19.8	..	..	..
Third quartile	23.6	22.8	22.9	..	..	..

years of age or older. The median age at which the high school instructor begins teaching is 21.7 years. One-fourth of the instructors begin teaching at 20 or younger and one-fourth at 23 or older. For the teaching staff as a whole, the median age for beginning teaching is 21.6 years. One-fourth begin teaching at the age of 20 or under and one-fourth at 23 or over.

Number of Years' Teaching Experience

As to teaching experience, the median principal has had 8.6 years. One-fourth of the principals have had less than five years' experience and approximately one-fourth have had 18 years or more. The

Table 48.—Number of Years' Teaching Experience

Number of years	Principals	Teachers	Total	Percent principals	Percent teachers	Percent total
1	11	74	85	8.9	25.3	20.4
2	6	42	48	4.9	14.3	11.5
3	5	31	36	4.0	10.6	8.6
4	7	25	32	5.7	8.5	7.7
5	13	20	33	10.6	6.8	7.9
6	6	17	23	4.9	5.8	5.5
7	11	11	22	8.9	3.8	5.3
8	2	7	9	1.6	2.4	2.2
9	4	6	10	3.2	2.0	2.4
10	4	4	8	3.2	1.4	2.0
11	6	4	10	4.9	1.4	2.4
12	4	3	7	3.2	1.0	1.7
13	2	2	4	1.6	0.7	0.9
14	2	5	7	1.6	1.7	1.7
15	1	4	5	0.8	1.4	1.2
16–20	17	15	32	13.8	5.1	7.7
21–25	7	12	19	5.7	4.1	4.6
26–30	7	9	16	5.7	3.1	3.8
31–35	6	2	8	4.9	0.7	2.0
36 and over	2	..	2	1.6	..	0.5
Median[1]	8.6	3.4	4.7	..	..	..
First quartile	4.6	1.4	1.9	..	..	..
Third quartile	17.9	7.5	11.1	..	..	..

[1] From the fact that the data were gathered at the close of the school year and that the teachers quite generally reported the year just being completed as one year's experience, and also from the fact that anything over a half-year was counted as a year, the median was computed from the mid-point between years.

median teacher has had 3.4 years of teaching experience, one-fourth have had less than a year and a half, and one-fourth have taught more than seven years. For both principals and teachers the median teaching experience is 4.7 years, with one-fourth having had two years or less and one-fourth eleven years or more. Forty-eight percent have taught less than five years as compared with 42.5 percent for the teachers in high schools accredited by the North Central Association of colleges and secondary schools. The most noticeable facts about the principals and teachers of the New York rural high schools from the standpoint of experience are: (1) The wide range in number of years running from less than one year to 41 years; and (2) the fact that one-half have had less than five years of experience, while one-fourth have taught two years or less. These facts as to the large number of young, inexperienced principals and teachers in the small rural high schools, combined with other facts gathered from the actual visitation of over 70 rural high schools, indicate among other things that the rural high schools furnish apprenticeship teaching for the larger high schools of the State.

Number of Years in Present Position

An important factor in the work of a school is the permanency of its teaching personnel. A large proportion of new teachers each year is undesirable even though they are teachers of experience. The data collected from the group forming the basis of this study, as well as the impression gained from the visitation of rural high schools, indicate that instructors remain as a general thing but a year or two in the same school. Over 31 percent[1] of the principals and 49 percent of the teachers, or 44 percent for both, were teaching their first year in the particular high school where they were at the time of making the report. Over 19 percent of the principals and practically 26 percent of the teachers, or 24 percent for both, were teaching their second year in the same school. Over 89 percent of the high school staff had been in their present positions five years or less, while 79 percent had been in their present positions three years or

[1] Approximately 33 percent of the principals of the rural high schools were serving their first year in their position in 1921–22, as shown by comparing the 1920 and the 1921 Directories of the University of the State of New York.

less. These figures agree very closely with the facts found with regard to tenure of all secondary school teachers in Livingston County, where 55 percent were teaching their first year in the school.[1]

TABLE 49.—NUMBER OF YEARS IN PRESENT POSITION

Number of years	Principals	Teachers	Total	Percent principals	Percent teachers	Percent total
1	39	144	183	31.7	49.1	44.0
2	24	76	100	19.5	25.9	24.0
3	19	27	46	15.4	9.2	11.1
4	15	10	25	12.9	3.4	6.0
5	10	5	15	8.1	1.7	3.6
6	6	3	9	4.9	1.0	2.2
7	3	7	10	2.4	2.4	2.4
8	1	1	2	0.8	0.3	0.5
9	..	3	3	..	1.0	0.8
10	1	3	4	0.8	1.0	0.9
11	1	..	1	0.8	..	0.2
12	1	2	3	0.8	0.7	0.8
13	..	2	2	..	0.7	0.5
14	1	..	1	0.8	..	0.2
15	..	..	..	..	..	..
16–20	1	4	5	0.8	1.3	1.2
21–25	1	3	4	0.8	1.0	0.9
26–30	..	1	1	..	0.3	0.2
Not reported	..	2	2	..	0.7	0.5

NUMBER OF MONTHS EMPLOYED

The teaching corps of the rural high school are commonly employed for ten months, 95 percent (94.7) teaching on that basis. Less than three percent of those reporting (2.6) were employed the full twelve months, these being in nearly every instance principals and teachers giving instruction in vocational agriculture. Almost three percent (2.7) were employed for less than 10 months of the year.

TABLE 50.—NUMBER OF MONTHS EMPLOYED

Number of months	9	9.5	10	11	12
Principals	..	..	120	..	3
Teachers	9	2	274	..	8
Total	9	2	394	..	11
Percent of total	2.2	0.5	94.7	..	2.6

[1] Livingston County Survey, University of the State of New York, Bulletin 738, p. 91.

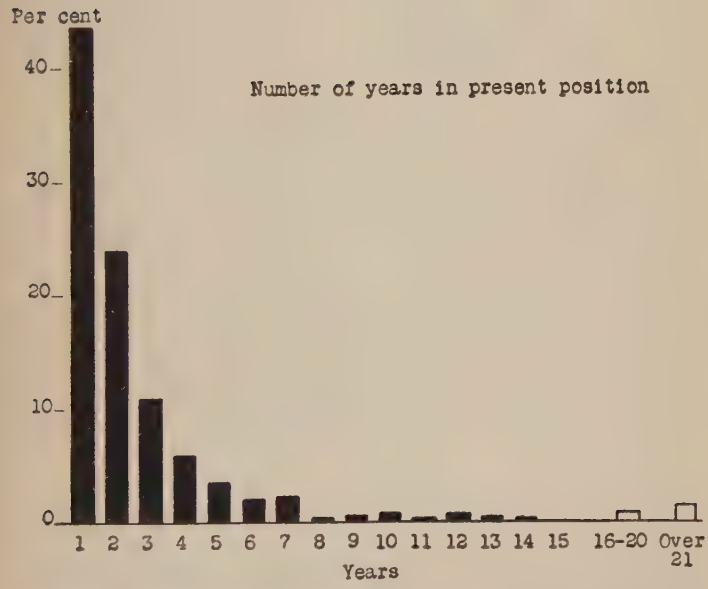

Diagram 13.—Teaching experience and number of years in present position of rural high school teachers

Salary

The data from the 123 principals reporting indicate that the salaries for rural high school principals for 1920–21 ranged from $900 to $3200. The median salary was approximately $1750, while one-fourth of the principals received $1500 or less and one-fourth $2040 or more. For teachers the range was from $750 to $2500. One-half of the teachers received a salary of less than $1225; one-fourth received less than $1120 and one-fourth over $1335.

A comparison of these figures with the 1919–20 salaries of 1784 rural high school teachers and 603 rural high school principals of the State shows an increase in 1920–21 over 1919–20 of $287.40 in the median salary of teachers and of $207.30 in the median salary of principals. These facts would seem to indicate that teachers re-

Table 51.—Salaries of 416 Rural High School Principals and Teachers in 1920–21

Amount received	Number of principals	Number of teachers	Amount received	Number of principals	Number of teachers
$750– $799	..	1	$2,000–2,049	12	2
800– 849	..	1	2,050–2,099	..	..
850– 899	..	..	2,100–2,149	4	1
900– 949	3	7	2,150–2,199	..	..
950– 999	..	1	2,200–2,249	6	1
1,000–1,049	4	34	2,250–2,299	1	..
1,050–1,099	1	14	2,300–2,349	1	..
1,100–1,149	..	43	2,350–2,399	..	..
1,150–1,199	1	11	2,400–2,449	..	1
1,200–1,249	4	76	2,450–2,499	..	..
1,250–1,299	2	9	2,500–2,599	5	1
1,300–1,349	2	32	2,600–2,699	3	..
1,350–1,399	1	5	2,700–2,799	1	..
1,400–1,449	8	17	2,800–2,899	2	..
1,450–1,499	..	4	3,000–3,099	4	..
1,500–1,549	22	12	3,100–3,199	..	..
1,550–1,599	..	2	3,200–3,299	1	..
1,600–1,649	3	8			
1,650–1,699	2	1			
1,700–1,749	9	1	Total.....	123	293
1,750–1,799	2	4			
1,800–1,849	12	3	Median.....	$1,746.20	$1,221.70
1,850–1,899	2	..	First quartile	1,509.80	1,116.73
1,900–1,949	4	1	Third quartile	2,037.54	1,334.54
1,950–1,999	1	..			

TABLE 52.—SALARIES OF 2,387 RURAL HIGH SCHOOL PRINCIPALS AND TEACHERS IN 1919–20

Amount received	Number of principals	Number of teachers	Amount received	Number of principals	Number of teachers
$600– $649	..	12	$1,950–1,999	2	..
650– 699	..	11	2,000–2,049	26	2
700– 749	..	51	2,050–2,099	2	..
750– 799	..	79	2,100–2,149	12	2
800– 849	3	220	2,150–2,199	2	..
850– 899	2	247	2,200–2,249	18	..
900– 949	6	385	2,250–2,299	5	..
950– 999	7	175	2,300–2,349	7	1
1,000–1,049	20	232	2,350–2,399	..	1
1,050–1,099	9	72	2,400–2,449	2	..
1,100–1,149	38	83	2,450–2,499	1	..
1,150–1,199	15	21	2,500–2,549	7	..
1,200–1,249	43	45	2,550–2,599	2	1
1,250–1,299	17	19	2,600–2,649	8	..
1,300–1,349	45	33	2,650–2,699	..	..
1,350–1,399	13	7	2,700–2,749	..	..
1,400–1,449	39	15	2,750–2,799	1	..
1,450–1,499	4	6	2,800–2,899	2	..
1,500–1,549	51	21	2,900–2,999	3	..
1,550–1,599	5	6	3,000 andover	11	..
1,600–1,649	58	8			
1,650–1,699	7	4			
1,700–1,749	39	10	Total.....	603	1,784
1,750–1,799	10	2			
1,800–1,849	37	10	Median.....	$1,538.71	$934.32
1,850–1,899	4	1	First quartile	1,271.80	863.77
1,900–1,949	20	2	Third quartile	1,827.72	1,033.05

ceived in 1920–21 salary increases over 1919–20 to an amount approximately equal to the $300 per teacher from State funds under the provisions of the Lockwood-Donahue act. In the case of principals the increase seems to have been to the extent of approximately two-thirds of the $300 available from the special State fund.

ECONOMIC STATUS

The data indicate that more than one-half of the rural high school teaching staff have no source of income beyond their salaries received as principals and teachers. In round numbers, 53 percent of the principals reported that they received no money from any other source. Practically 69 percent of the teachers reported no money

from any other source. Combining the data for principals and teachers shows that over 88 percent of the staff received $100 or less from sources other than salary in 1920–21.

TABLE 53.—THE AMOUNT OF MONEY DERIVED FROM OTHER SOURCES DURING THE YEAR (INTEREST RECEIVED, INCOME FROM OTHER INVESTMENTS, ETC.)

Amount received	Principals	Teachers	Total	Percent of principals	Percent of teachers	Percent of total
Nothing.....	65	201	266	52.8	68.6	63.9
$1– $25	8	33	41	6.5	11.3	9.8
26– 50	18	10	28	14.6	3.4	6.7
51– 75	2	7	9	1.6	2.4	2.2
76– 100	4	21	25	3.2	7.1	6.0
101– 150	4	1	5	3.2	0.3	1.2
151– 200	5	6	11	4.1	2.0	2.6
201– 300	6	4	10	4.8	1.4	2.4
301– 400	..	1	1	..	0.3	0.2
401– 500	3	1	4	2.4	0.3	0.9
501– 700	4	5	9	3.2	1.7	2.1
701–1,000	..	1	1	..	0.3	0.2
1,001 or over	..	2	2	..	0.7	0.5
Not reported...	4	..	4	3.2	..	1.0

TABLE 54.—APPROXIMATE AMOUNT OF MONEY EARNED OUTSIDE REGULAR TEACHING SALARY DURING THE YEAR

Amount earned	Principals	Teachers	Total	Percent of principals	Percent of teachers	Percent of total
Nothing.....	63	205	268	51.2	69.9	64.4
$1–$25	6	9	15	4.9	3.1	3.6
26– 50	2	29	31	1.6	9.9	7.4
51– 75	4	1	5	3.2	0.3	1.2
76–100	11	18	29	8.9	6.1	7.0
101–125	8	1	9	6.5	0.3	2.2
126–150	..	4	4	..	1.4	1.0
151–175	1	..	1	0.8	..	0.2
176–200	9	7	15	7.3	2.4	3.6
201–250	..	2	2	..	0.7	0.5
251–300	10	6	16	8.1	2.0	3.8
301–400	3	4	7	2.4	1.4	1.7
401–500	1	3	4	0.8	1.0	1.0
Over 500	4	2	6	3.2	0.7	1.4
Not reported.....	1	3	4	0.8	1.0	1.0

The larger proportion of the staff reported no money earned from other sources in addition to their salaries as principals and teachers. Over 51 percent of the principals and 70 percent of the teachers reported no additional earnings. For both principals and teachers approximately 84 percent earned $100 or less outside the regular teaching salary. (Table 54.)

One factor determining the attractiveness and appeal of a calling as a permanent life-work is its possibility of an annual saving. In New York the system of teacher's pensions in part answers this requirement. If a calling is to attract the best type of individual, however, it would seem that a system of pensions should be regarded as supplementary and that in addition the financial returns should be sufficient to make possible the gradual accumulation of a personal reserve. The figures as to savings of rural high school principals and teachers indicate that at present such opportunities are insufficient to attract and hold the type of person most needed in rural high school work.

Almost 40 percent of the principals reported no savings beyond

TABLE 55.—AMOUNT SAVED DURING THE YEAR IN ADDITION TO LIFE INSURANCE AND PENSION

Amount saved	Principals	Teachers	Total	Percent of principals	Percent of teachers	Percent of total
Nothing	49	130	179	39.8	44.4	43.0
$1– $50	2	6	8	1.6	2.0	1.9
51– 100	5	27	32	4.1	9.2	7.7
101– 150	11	4	15	8.9	1.4	3.6
151– 200	5	45	50	4.1	15.3	12.0
201– 250	..	9	9	..	3.1	2.2
251– 300	5	7	12	4.1	2.4	2.9
301– 350	1	4	5	0.8	1.4	1.2
351– 400	11	44	55	8.9	15.0	13.2
401– 500	14	9	23	11.4	3.1	5.5
501– 600	2	1	3	1.6	0.3	0.7
601– 700	6	3	9	4.8	1.0	2.2
701– 800	4	2	6	3.2	0.7	1.4
801– 900	1	..	1	0.8	..	0.2
901–1,000	3	1	4	2.4	0.3	1.0
Over 1,000	3	..	3	2.4	..	0.7
Not reported	1	1	2	0.8	0.3	0.5

pension and life insurance. Of the teachers, 44 percent reported no other savings. For the teaching staff as a whole 43 percent reported no other savings. Over 52 percent reported savings for the year of $100 or less and 25 percent saved $350 or more.

Exclusive of pensions, 30 percent of the principals and 69 percent of the teachers, or practically 58 percent for both, reported no life insurance. Less than 13 percent of the teaching staff paid insurance premiums during the year in excess of $100.

TABLE 56.—AMOUNT PAID FOR LIFE INSURANCE EXCLUSIVE OF PENSION

Amount paid	Principals	Teachers	Total	Percent of principals	Percent of teachers	Percent of total
Nothing	37	203	240	30.1	69.3	57.7
$1–$25	9	9	18	7.3	3.1	4.3
26– 50	12	32	44	9.7	10.9	10.6
51– 75	17	12	29	13.8	4.1	7.0
76–100	4	3	7	3.2	1.0	1.7
101–125	12	2	14	9.7	0.7	3.4
126–150	16	..	16	13.0	..	3.8
151–175	..	10	10	..	3.4	2.4
176–200	1	1	2	0.8	0.3	0.5
201–250	2	..	2	1.6	..	0.5
251–300	4	1	5	3.2	0.3	1.2
Over 300	2	..	2	1.6	..	0.5
Not reported	7	20	27	5.7	6.8	6.5

PERSONS ENTIRELY OR PARTIALLY DEPENDENT

In reply to the item as to responsibility for the entire support of dependents, approximately 85 percent of the principals reported. Of those reporting, 64 percent had one adult entirely dependent upon them for support and five percent had two. Thirty-one percent had no one entirely dependent upon them for support. Ninety-three percent of the teachers answered this item. Of this number 92 percent had no adults entirely dependent upon them while eight percent had one adult. Forty-one percent of the principals reporting had entire support of one or more children, while three percent of the teachers reporting had children entirely dependent upon them for support.

TABLE 57.—PERSONS DEPENDENT UPON PRINCIPALS AND TEACHERS FOR SUPPORT

(a) Persons Entirely Dependent

Number dependent	Adults				Children						
	Not reported	None	1	2	None	1	2	3	4	5	6
Principals	18	33	67	5	62	23	6	10	1	2	1
Teachers	19	253	20	1	266	6	1	..	1	..	..
Total	37	286	87	6	328	29	7	10	2	2	1
Percent principals[1]	14.6	31.4	63.8	4.8	59.0	21.9	5.7	9.5	0.9	1.9	0.9
Percent teachers	6.5	92.3	7.3	0.4	97.1	2.2	0.4	..	0.4	..	..
Percent total	8.9	75.5	22.9	1.6	87.5	7.7	1.9	2.7	0.5	0.5	0.3

(b) Persons Partially Dependent

Number dependent	Adults					Children			
	Not reported	None	1	2	3	None	1	2	3
Principals	16	90	14	3	..	101	4	1	1
Teachers	19	231	31	10	2	258	13	3	..
Total	35	321	45	13	2	359	17	4	1
Percent of principals[1]	13.0	84.1	13.1	2.8	..	94.4	3.7	0.9	0.9
Percent of teachers	6.5	84.3	11.3	3.6	0.8	94.2	4.7	1.2	..
Percent of total	8.4	84.2	11.9	3.4	0.5	94.2	4.4	1.1	0.3

[1] Except in the case of the percent not reporting, where the percentage is computed on the basis of the full number, the percentages are computed on the basis of the actual number reporting on the item in question.

Eighty-seven percent of the principals and 93 percent of the teachers reported on the item as to persons partially dependent upon them for support. Of the principals reporting, 84 percent had no adults partially dependent upon them and 94 percent no children partially dependent; while 16 percent were partially responsible for the support of one or two adults and six percent for one to three children. Of the teachers reporting, 84 percent had no adults partially dependent upon them for support and 94 percent no children. Sixteen percent had the responsibility for the partial support of one to three adults and six percent for the partial support of one to two children. (See Table 57.)

Money Earning Work Done Other than Teaching

On this item the proportion of principals and teachers reporting was comparatively small, approximately 63 percent of the group studied replying. Of the principals reporting, over 31 percent had never done money earning work other than teaching, and the same was true of over 47 percent of the teachers who replied to the item. An additional 23 percent of the principals and 32 percent of the teachers had done other money earning work only during the summer. Approximately 10 percent of the principals reporting had followed some other type of work for one year or less and 35 percent had engaged in other types of work for a period of one to ten years. Of the teachers reporting, approximately five percent had followed some other type of work for one year or less, and over 15 percent had pursued another calling for a period of from one to 20 years. While the data on the point in question are insufficient for any definite conclusions, they would seem to indicate that teaching has been predominantly the work of those giving instruction in the rural high schools of New York. It is to be noted, however, that over one-fifth of those reporting have followed other vocations for periods of time varying from one-half year to twenty years. It is significant also that only for principals is the number having followed other lines of work for a period of one year or more more than a third of those reporting. Types of work most frequently reported by principals as having been followed were farming, clerical work, business, factory work, insurance, tutoring and the work of sales-

man; by teachers: tutoring, office work, clerking, farming, factory work, and music.

TABLE 58.—MONEY EARNING WORK ENGAGED IN OTHER THAN TEACHING

Length of time	None	Only in summer	Less than one year	One year	Two years	Three years	Four years	Five years	6–10 years	11–20 years	Number reporting	Not reporting
Principals....	24	18	8	13	3	2	2	3	4	..	77	46
Teachers.....	88	60	10	17	5	..	2	1	1	2	186	107
Total.....	112	78	18	30	8	2	4	4	5	2	263	153
[1] Percent of principals	31.2	23.4	10.4	16.9	3.9	2.6	2.6	3.7	5.2	..	62.6	37.4
Percent of teachers.	47.3	32.3	5.4	9.1	2.7	..	1.1	0.5	0.5	1.1	63.5	36.5
Percent of total....	42.2	29.6	6.8	11.4	3.0	0.8	1.5	1.5	1.9	0.8	63.2	36.8

PROFESSIONAL GROWTH

It is quite generally recognized that an important factor in the professional growth of the members of a profession is their constant interest in and contact with the current problems and trends of the profession. The physician who is advancing in his calling must keep in touch with the progress made in medicine and the treatment of disease. The progressive farmer keeps informed as to the developments in the science of agriculture. Likewise the teacher, following one of the most difficult of callings, if he is to continue to develop in teaching skill and understanding, must at all times be acquainted with the best that is being done in education, at least in the phases pertaining to his particular type of work.

While it is practically impossible to estimate accurately the professional interest and growth of a group except by the observation and study of the individuals composing it, there are certain things which may be regarded as an index. One index of professional interest and growth on the part of the teacher is professional study while in service. Among other things are membership in profes-

[1] The percentages as to types of money earning work engaged in other than teaching are computed on the basis of number reporting.

sional organizations for teachers, professional reading, and the study of the work of other teachers.

As to the manner of spending the summer vacation, 406 of the 416 principals and teachers gave definite replies. Fifty-four or 13 percent reported attendance at summer school; 131 or 31.5 percent worked during the summer; 150 or 36 percent gave "at home" or "rest" as the manner of spending the summer vacation, and 16 or 3.8 percent spent the time in study. Other ways mentioned by a few for each were: tutoring, farming, keeping house, teaching music, clerical work, travel, and athletics.

TABLE 59.—MANNER OF SPENDING THE SUMMER VACATION

Manner of spending vacation	Principals	Teachers	Total	Percent of total
Summer school	22	32	54	13.0
Study	5	11	16	3.8
Work	55	76	131	31.5
At home	10	58	68	16.3
Rest	10	72	82	19.7
Tutoring	2	4	6	1.4
Teach music	1	6	7	1.7
Farm	8	2	10	2.4
Keep house	1	10	11	2.6
Clerical work	1	5	6	1.4
Travel	2	2	4	1.0
Athletics	..	2	2	0.5
Miscellaneous	4	5	9	2.2
Not reported	2	8	10	2.4

With regard to membership in educational organizations, 29 percent of the 123 principals reported no membership in an educational organization. Thirty-four percent were members of the New York State Teachers Association; 20 percent belonged to other New York State educational associations. Approximately 28 percent were members of regional or county organizations. Six and one-half percent belonged to the National Education Association and eight percent were members of other national educational organizations.

Of the teachers, 48 percent reported no membership in an educational organization. Thirty-seven percent were members of the

New York State Teachers Association; 2.7 percent belonged to other educational organizations of the State; and 13 percent belonged to regional or county associations. Five percent of the teachers were members of the Modern Language Association, two percent of the National Education Association, and 7.4 percent reported membership in other national teachers' organizations. The average membership for each principal was approximately one organization: the average membership in educational organizations for each teacher was approximately two-thirds.

TABLE 60.—MEMBERSHIP IN TEACHERS' ORGANIZATIONS

Kind of organization	Principals	Percent	Teachers	Percent	Total	Percent
None	36	29.3	141	48.1	177	42.5
N. Y. State Teachers Association	42	34.1	108	36.9	150	36.1
Section or County Association	34	27.6	39	13.3	73	17.5
Nat'l Education Association	8	6.5	6	2.0	14	3.4
Other Nat'l Teachers Associations	10	8.1	21	7.2	31	7.4

In answer to the query as to professional reading done during the year, slightly over 40 percent of the rural high school principals reported no reading in professional magazines and journals. The five publications most often mentioned by the principals who had done professional reading of this sort were, in order of frequency given, The School Board Journal, New York Teachers Association Journal, The State Department School Bulletin, American Education, and the Journal of the National Education Association. Thirty-one percent of the principals reported no reading of professional books during the year. The five books most frequently mentioned by those who had read professional books were, in the order of frequency mentioned, Methods of Teaching in High Schools, Parker; Common Sense in School Supervision, Wagner; The Discipline of the School, Morehouse; The Class-room Teacher, Strayer and Engelhardt; and the Administration of Village and Consolidated Schools, Finney and Schafer.

Forty-three percent of the teachers reported no reading of professional magazines and journals during the year, and an additional six percent had read only the New York State Teachers Association Journal. The five most frequently mentioned educational magazines and journals read by teachers were in the order of frequency mentioned: New York State Teachers Association Journal, The English Journal, The Modern Language Journal, The Historical Outlook, and the Classical Journal. Forty-nine percent of the teachers reported no reading of professional books during the year. Those who had done reading in professional books gave the following most frequently, in the order mentioned: The Teaching of English, Chubb; The Teaching of English in Secondary Schools, Thomas; School Discipline, Bagley; All the Children of all the People, Smith; and The Teaching of History, Johnson.

Of the 405 principals answering the questionnaire on administration and organization of the rural high school, 348 replied to the query as to the existence of a teachers' reading circle in their school. According to these replies there were during the school year of 1920–1921 twenty-three teachers' reading circles in the 348 schools, or one for each 15 schools.

TABLE 61.—TEACHERS' READING CIRCLES AS REPORTED BY 348 RURAL HIGH SCHOOL PRINCIPALS

Type of school	1–49 pupils	50–99 pupils	100–149 pupils	150 and over	Total
Number of schools with teachers' reading circle.....	7	7	4	5	23
Number of schools having no teachers' reading circle.....	170	101	43	11	325

The instructor in the city high school usually has the opportunity of coming in touch each day with other teachers giving instruction in the same subject. Under such circumstances discussions of organization of subject matter, method, and aims become almost inevitable. There is a sharing of problems and ways of solving them. In many cities also there is provision for the observation of teaching as done by the stronger teachers in the same high school or in other

schools. In the rural high school there is usually lacking the daily contact of a teacher with others doing the same type of work. The observation of teaching as done by other teachers is as a general thing rare or entirely lacking. Thus the rural high school teacher tends to lose the help and inspiration in his work that might come from such contacts.

The data supplied by 338 principals indicate that opportunity for one of these means of growth, the observation of teaching in other schools, is given teachers in a considerable number of schools. While 53 percent reported that their teachers had not observed teaching in other schools during the year, over 28 percent reported that their teachers had observed teaching in other schools once, and 19 percent reported two or more observations during the year. These replies indicate that many rural high school teachers have some opportunity to observe teaching as done by instructors in other schools.

Summary of Salient Points

The facts found with regard to the teaching staff of the rural high school show that a large proportion of the instructors are immature and inexperienced. One-fourth of the teachers (excluding the principals) under whose direction the pupil receives his training are 24 years old or younger, and over one-half his instructors, including his principal, are under 28 years of age. While there are undoubtedly many things to be said in favor of the young high school teacher filled with enthusiasm for his work, the lack of contact with mature instructors possessed of a background of experience is also undoubtedly a handicap in the training of the pupil in the rural high school.

Excluding his principal, one out of every four teachers of the rural high school pupil is practically without experience, having had one year or less, and one out of every five, including his principal. Practically one-half of his teachers are new to his school each year, and in over three schools out of every ten the pupil is under the guidance and counsel of a principal new to the position and to the community. He has practically one chance in seven of graduating under the same principal with whom he begins his school work.

Of the high school teaching staff, three in ten are men. This proportion of men to women teachers is not much below the ratio commonly found in high schools throughout the country. Considering, however, the fact that the male teacher in the small school is usually the principal, the actual teaching ratio is lower than that indicated by the proportion of men to women. In reality the pupil in the rural high school receives instruction from a man in less than one out of every four recitations. Without entering at all into the relative merits of the work done by men and women as high school instructors, the fact remains that the high school boy particularly would probably profit by more frequent contacts with men during his high school course. Especially in the promotion and stimulation of extra-class activities of the type interesting to boys more men are needed as teachers in the rural high schools. This would seem to be one of the problems worthy of serious attention.

Practically nine out of every ten instructors are of American stock. More than eight out of every ten are from the State of New York. Approximately three out of four are either from the open country or from villages. Between four and five out of every ten are from families interested in farming as an occupation. These facts indicate that a fair proportion of the teaching staff should, both by virtue of early experience and present occupational interests, have a sympathetic attitude toward and some understanding of rural life and rural problems. The high percentages coming from New York State should give a rural high school staff especially well informed as to problems within the State. There is a question, however, as to whether there might not be advantages in breadth of view and differences in viewpoint to be gained from a larger number of principals and teachers recruited from other states.

Approximately three in five of the rural high school teaching staff have had regular academic and professional training equal to graduation from a standard college. Four instructors in one hundred have done graduate work. Nineteen in one hundred have had an amount of regular training represented by graduation from a normal school; and nine in a hundred have done from one to four years of college work. Ten in a hundred have had less regular training than is required for graduation from a standard normal school and eight

percent have had only a high school course or high school plus one year in a high school training class. Conservatively stated, the facts show that more than 35 in each 100, or more than one out of three of the rural high school corps of instruction, have less training than the minimum standards generally recognized as desirable for teaching in standard high schools. This conclusion is based upon standards already existing. The North Central Association of Colleges and Secondary Schools, including in its territory eighteen States in the Middle West and West, requires that the instructors of academic subjects in high schools accredited by the Association shall have as a minimum preparation a four-year course in a standard college of which at least eleven semester hours must have been devoted to professional training. California has set as its standard for high school instructors in academic subjects graduation from college plus one year of advanced work. New York City requires graduation from a standard college or university (or the equivalent in the case of a teacher of modern foreign languages). In addition it requires either a year's experience in teaching in secondary schools or in college, or 300 hours of graduate work, 60 hours of which shall be devoted to methods in the subject to be taught, or combinations of graduate study and experience equivalent to the 300 hours of academic study.

The study of salaries in the rural high schools shows that there was a considerable increase in 1920–1921 over 1919–20. The increase is clearly due to the special funds coming from the State under the Lockwood-Donahue Act. Of both principals, and teachers, however, at least one-fourth received in 1920–1921 less than should be paid for high school instruction if the rural high school is to build up a well-trained permanent teaching force. A median salary of $1,750 for principalship positions with one-fourth under $1,500 is too low to attract and hold men of desirable training and ability to work in the rural high school. With a median salary for teachers of less than $1,225, and with one-fourth of the salaries under $1,125 and less than one-fourth over $1,350, the rural high school is not in a position to demand teachers with the desired amount of training or to hold such teachers when secured. Under existing salary conditions the well-trained teacher of ability will look toward the city

high school positions after a year or two of teaching experience gained in the rural high school.

It should be recognized that the question of salary is not the only factor drawing teachers toward the larger high schools. The social and professional advantages of the larger centers are undoubtedly important factors. The opportunities for greater specialization and the smaller number of daily teaching periods as contrasted with the wide range of subjects and larger number of teaching periods required in the rural high school are also factors operating to attract to the larger schools those planning to make teaching a profession. To offset these attractive features of the high school positions in urban centers, among other things, it would seem that the rural high school must offer greater salary inducements definitely rewarding teaching experience and professional improvement.

One of the most important factors in maintaining the efficiency of a teaching force is generally recognized to be its active interest in professional problems. All findings indicate that as a group the rural high school teachers give a small amount of time to those things tending toward professional growth. Many individual principals and teachers give much attention to professional reading and other means of professional improvement. As a group, however, the percentage attending summer schools is exceedingly low, being only 13 percent in the case of 416 principals and teachers studied. The data indicate also that a comparatively large percentage of the principals and teachers are not members of any teachers' associations. In the case of principals, 29 percent reported no membership in an educational organization and 48 percent of the teachers reported no membership. Four out of every ten principals and teachers reported no reading for the year in professional magazines and journals. Three out of ten in the case of the principals and five out of ten in the case of the teachers reported no professional books read during the year. In 23 out of 348 high schools for which data are available there were teachers' reading circles for the study of educational questions. In 47 percent of the 338 rural high schools where the principal reported on the item the teachers observed teaching in other high schools once or more than once during the year. All findings show that more opportunities for professional

improvement and more stimulation toward the professional growth of rural high school principals and teachers are needed in the State.

Recommendations for the Improvement of the Rural High School Teacher

All steps looking toward the improvement of the rural high school teaching staff should have as the aims: (1) The creation of a professional body of rural high school principals and teachers with academic and professional training equal to graduation from a standard college and with an amount of time devoted to professional training equal to at least twelve college semester hours; and (2) the stimulation of professional interest and growth during service.

I

It is therefore recommended:

1. That the existing system of certification as it applies to rural high school principals and teachers be simplified and modified with the aim of raising the standards for teaching in the rural high schools of New York, and of furnishing increased incentive for professional growth while in service.[1]

(*a*) That a College Graduate Professional Life Certificate be the only life certificate for teaching in the rural high schools of the State: (1) That this certificate state specifically, in the case of teachers of academic subjects, the major and minor groups of subjects, and in the case of a teacher of vocational subjects, the major field and one minor (which may be an academic group) in which the holder is authorized to give high school instruction; and (2) that this certificate be granted only after a minimum of five years of successful teaching in high school and one year of graduate study of which a minimum of one-half shall have been devoted to professional subjects. The major and minor groups shall be determined in terms of the amount of time required for major and minor groups of subjects respectively for graduation from a standard college as defined by the University of the State of New York.

[1] It should be noted that the Assistant Commissioner for Secondary Education in his report of 1914 called attention to the need of higher standards for teaching in the high schools of the State and recommended a plan similar in some respects to the one presented in this report. Report of the Commissioner of Education, 1914, pp. 194–195.

(*b*) That a College Graduate Professional Limited Certificate good for five years and renewable for an additional term of five years and requiring a minimum of twelve semester hours of professional training as a part of the work toward the college degree be, after 1927, the lowest certificate granted for teaching in the rural high schools of the State. It is recommended that this certificate state specifically, as in the College Graduate Professional Life Certificate, the major and minor groups of subjects in which the holder is authorized to give high school instruction, and that the interpretation of major and minor groups be identical with that in the College Graduate Professional Life Certificate.

(*c*) That a College Graduate Temporary Certificate good for two years and not renewable be granted on a degree from a standard college and authorizing the holder to give high school instruction in groups of subjects specifically stated, the interpretation of major and minor subject groups to be identical with that in the higher certificates. It is recommended that this certificate be discontinued after 1927.

(*d*) It is recommended that for principalship or supervisory work in the rural high schools of the State, either certificate (*a*) or (*b*) be required, with the special requirements: (1) that one-half of the professional study regularly required for the certificate be in the fields of school administration, organization, and supervision; or (2) that a minimum of six semester hours shall have been devoted to the study of these subjects in addition to the regular requirements in professional subjects, as provided for in certificates (*a*) and (*b*).

II

The standards proposed in the plan of certification for rural high school teachers are conservative in comparison with those the North Central Association of Secondary Schools and Colleges, including in its territory eighteen States, requires for teaching in high schools accredited by the association. They are conservative also when compared with the requirements for teaching in high schools in California, or in New York City, and other cities. It is realized, however, that the proposed standards are not justified under pres-

ent conditions as to salaries in the rural high schools. Therefore it is recommended that:

1. A graduated salary schedule be formulated for the rural high schools of the State that shall be based upon:

(*a*) Academic and professional training.

(*b*) Professional experience and success.

(*c*) Professional improvement in service.

This salary schedule should be designed to reward teaching on the basis of the three items above rather than upon the size of the high school in which the teaching is done or upon the wealth of the particular community in which the school is situated.

III

One of the great needs of the New York rural high school today as shown by all phases of the study of the rural high schools is a body of principals and teachers of thorough professional training and informed and alive to the recent developments in all aspects of secondary education. To insure the existence of such a professional body the recommendations in I and II are important factors. There is also imperative the development of specific means and agencies, first, to prepare persons to become teachers in the rural high schools of the State; and secondly, for placing before principals and teachers in service the latest ideas and means for the improvement of their work. To meet the needs of the first group, those preparing to teach, the State should make more adequate provision for the training of rural high school principals and teachers. To meet the needs of the second group, those in service, it would seem advisable to make more specific provision for the consideration of rural high school problems in administration, supervision, and instruction. To accomplish this end partially, more definite attention should be given to the consideration of rural high school problems in such existing agencies as the State Teachers Association and the various local and regional teachers' organizations. These should be supplemented by agencies to be devised and set up specifically for the training of rural high school principals and teachers in service, as: summer school courses of college grade planned definitely to consider the problems of the small high school in the selection and

organization of subject matter and the methods of teaching the various high school subjects; in the administration, organization, and supervision of the small high school; and in the principles underlying secondary education. Conferences for high school principals and teachers dealing with specific problems should become a feature in each of the intermediate school units of the State. In addition, extension courses should be encouraged wherever possible.

CHAPTER VI

THE OBSERVATION OF CLASS-ROOM INSTRUCTION

ONE of the important factors in determining the efficiency of any school or type of schools is undoubtedly the work of the class-room teacher. To give an adequate picture of New York rural high schools it was deemed necessary to make a careful study of a comparatively large number of recitations in a large number of high schools and in a fairly wide range of subjects.

The difficulties of estimating definitely the efficiency of any recitation were, of course, recognized. Scientifically established criteria of high school teaching are unfortunately lacking. It seemed advisable to devise a plan which should first give attention to those phases of high school class-room work that are generally conceded to be indices of its efficiency; and secondly, be reducible in part at least to statistical treatment. It was deemed important also that the plan used should be interpreted similarly by all persons working on this problem of the survey in order to yield comparable results.

Method Used

With the above requirements in the foreground, a provisional plan for the observation of high school instruction was formulated. This provisional plan was then submitted to various members of the survey staff and to other persons of wide experience in education and particularly in high school supervision. After revision in accordance with criticisms offered the plan was tested in the actual observation of a number of recitations in several high schools and the existing weaknesses eliminated in so far as possible. The outline as finally used in the survey was divided into five main sections: (1) Class Routine; (2) Assignment and Study Guidance; (3) Conduct of the Recitation, with five special items for subjects of the form or drill type, as mathematics and languages, and for recita-

tions in other subjects where the work of the recitations was upon these phases; (4) General observations; and (5) Critical comments.

NEW YORK STATE RURAL SCHOOL SURVEY
Observation of High School Teaching

School *Date* *Observer*

Subject *No. pupils* *Class or year*

Lesson Topic

I. Class Routine:

(1) Time spent in preliminaries?.....

(2) Were the materials systematically arranged and handled?.....

(3) Conditions favorable for work?.....Chief hindrances?.....

.....

II. Assignment and Study Guidance:

(1) Place of assignment: Beginning?.....Close?.....Divided?.....

(2) Amount of time consumed?.....Taken by pupils in written form?.....

(3) Aim: Definite (clear statement of objective to be attained?).....

.....Certain number of pages or topics in text?.....

(4) How motivated?.....Were "Regents" mentioned?.....

How?.....

(5) Did pupils enter into the making of assignment by suggesting problems or topics of interest to them?.....

(6) What was done in the way of suggestions for working out assignment (problems, guiding topics, supplementary readings, observations, experiments, methods of attack, community sources)?.....

.....

(7) Was any differentiation in assignment made?.....On what basis?

.....

III. Conduct of Recitation:

(1) Was aim clear and definite, either as stated by instructor or as evident from recitation?.....remote?.....immediate?.....

(2) Type of lesson: development.....drill.....review.....study.....

catechizing.....application.....appreciation.....other types.....

.....

(3) Procedure: question and answer.....topical discussion.....class reports.....telling.....lab. exercises.....note taking.....reading of text and discussion.....demonstration.....seat work.....

blackboard work.....oral drill.....criticism of work previously done by the class.....other procedure.....

(4) Outstanding characteristics of questions: thought stimulating..... yes and no.....clear cut.....vague.....other characteristics..... .....

(5) Fraction of answers repeated by instructor? apparent purpose?..... .....

(6) Fraction of class called upon?.....fraction of responses satisfactory to instructor?.....number of failures to respond when called upon? .....

(7) Were pupils encouraged to contribute new material?.....to express divergent views?.....were supporting facts insisted upon?.....

(8) What devices were used to give concreteness to the work (blackboard illustrations.....objects.....drawings.....specimens.....maps .....examples.....charts.....applications of principle to known situations, etc.?) .....

(9) Were any connections made with other school subjects?..... With other things within pupils' experience?.....

(10) Did instructor try to arrive at conclusions for which there was evident lack of facts in possession of pupils?..... What was done?.....

(11) Did recitation hold consistently to its purpose?.....rambling?.....

(12) What variety in procedure was used?.....

For Form Subjects Only:

(13) Were responses made by class in the main, accurate?.....inaccurate?.....given with confidence?.....doubt?.....

(14) Were errors immediately checked up and pupils making them required to give correct responses?.....

(15) To what extent were the corrections contributed by members of the class?.....

(16) Were the pupils given practice in applying known facts and principles to problems containing new elements?.....in miscellaneous order?.....

(17) Drill: Fraction of recitation given to drill?..... .....snappy?..... listless?.....emphasize pivotal points?.....attention given to speed?.....accuracy?.....need of drill made evident to pupils?..... how?.....to what extent was time spent drilling individual pupils upon items apparently known to rest of class?.....

IV. General Observations:

(1) Was attitude of pupils—attentive?.....orderly?.....indifferent?..... disorderly?.....If indifferent or disorderly, what was apparent cause?.....

(2) Were desirable habits of work emphasized: punctuality in assigned work?.....neatness?.....thoroughness?.....responsibility?.....

(3) Were pupils in process of recitation frequently interrupted by other pupils?.....by instructor?.....purpose?.....
(4) Fraction of recitation consumed by instructor talking?.....
to what end?.....?
(5) Fraction of recitation that instructor remained seated at desk?.....
(6) Did instructor give evidences of adequate preparation for the recitation?.....pupils?.....
(7) What use did instructor make of text during recitation?.....
(8) Fraction of class kept busy during recitation?.....
(9) Were "Regents" mentioned?.....How?.....
(10) What points in recitation stood out in mind of observer as having been adequately developed during recitation?.....
.....
(11) In the opinion of observer what was the strongest feature of the recitation?.....
Weakest?.....

V. Critical Comments: Criticize carefully organization and procedure, *e.g.*, questioning, presentation, development of main points, manner of instructor toward class, etc.

The plan having been determined upon, a staff of seven persons, all of whom had had broad experience in directing and supervising high school instruction, was selected. This staff met and gave a day to a careful analytical study of the plan and to training in its use. Definite written instructions were given to each person as to the methods of observation and the recording of data so that as little variation as possible might result. Each recitation observed was seen in its entirety and every period of observation was followed by a free period during which the observer completed his report on the recitation visited before making the next observation. The subjects the teaching of which was observed were those most commonly taught with the exception of two recitations in commercial arithmetic and commercial geography.

Number of Schools Visited and Recitations Observed

The observation staff studied class-room work in 61 different high schools located in every section of the State and including all types of rural high schools based upon number of pupils enrolled. One hundred and seventy-nine recitations were observed as taught by

144 different instructors. The observations were distributed as to the time of the year as follows:

April 18–27, 1921	8	observations
May 9–13, 1921	100	"
May 16–20, 1921	42	"
October 10–28, 1921	29	"

The subjects the teaching of which was observed, and number of recitations in each, were as follows:

History, 24; English, 35; algebra, 22; plane geometry, 15; foreign languages, 33; biology, 23; physics, 11; civics, 14; commercial arithmetic, 1; commercial geography, 1; total, 179.

Statistical Résumé of Results

In detail, the observation of high school instruction in the rural high schools visited brought out the following facts, which it seems reasonable to assume represent fairly well teaching in all rural high schools of the State:

I. Class routine:

1. How much time was spent in the steps preliminary to the work of the recitation?

   None, 102 recitations; 1 to 3 minutes, 66; 4 to 5 minutes, 9; 6 to 10 minutes, 2 recitations.

2. Were materials systematically arranged and handled?
   None used other than text-book, 99; yes, 68; no, 12.

3. Were conditions favorable for work?

   No, 44 recitations; yes, 109; fair, 26.

What were the chief hindrances in carrying on the work?

Large assembly room, 2; class in study room, 38; dark room, 10; small crowded room, 9; shortage of books, 15; other hindrances reported were chairs without writing arms; insufficient blackboard space; and noisy room.

II. Assignment and Study Guidance:

1. At what point in the recitation was the assignment made?
   Beginning, 53 recitations; close, 96; divided, 30.

2. How much time was devoted to the making of the assignment?

   Less than ½ minute, 36 cases; ½ to 1 minute, 50; 1 to 5 minutes, 63; 5 minutes or over, 30.

3. Was the aim of the assignment definite (clear statement of the objectives to be attained) or was it indefinite and vague?

   Definite, 55 cases; indefinite and vague, 102; difficult to classify, 22.

3 (*a*). Was the assignment taken by the pupils in written form?

No, 100 cases; yes, 50; merely checked in text, 29.

3 (*b*). Was the assignment made in terms of pages in the textbook only?

Yes, 132 cases; no, 47.

4. Was any attempt made to motivate the assignment?

   No attempt, 94 recitations; some attempt made, 85 recitations.

4 (*a*). What was the nature of the motivation?

Mention of Regents examinations, 45 recitations; mention of school examinations, 5; emphasizing the need of study, 12; connections made with current questions, 8; interest in new phases of the work, 3; rivalry between members of the class, 2; remain after school, 2; told to prepare the lesson, 2; assignment of problems, 5; interest in characters in literature, 1.

5. Did pupils enter into the making of the assignment by suggesting problems or topics of interest to them?

   No, 167 assignments; yes, 12 assignments.

6. What was done in the way of suggestions for working out the assignment?

   Nothing, 107 cases; problems, 10; calling attention to guiding topics and important items, 36; hints as to methods of attack, 17; assignment of supplementary reading, 9.

7. Was any differentiation made in the assignment, and if so, what?

   No, 174 cases; yes, 5.

7 (*a*). Nature of the differentiation:

Individual pupils asked to choose a subject, 2 assignments; Assignments of topics to individual pupils, 2; Assignment to individuals of topics at close of chapter in text-book, 1.

III. The Conduct of the Recitation:

1. Was the aim of the recitation clear and definite, either as stated by the instructor or as evident from the recitation, or was it indefinite?

Clear and definite, 99 recitations; indefinite, 80.

1 (*a*). Was the aim remote or immediate?

Remote, 72 recitations; immediate, 44; so indefinite as to make classification impossible, 63.

2. What types of lesson were most prominent? [1]

Development, 51 recitations; review, 85; catechizing, 82; drill, 44; application, 39; appreciation, 13; telling, 15; study, 8; debate, 1; observation, 1.

3. What was the procedure or method of attack used in the recitation?

Question and answer, 137; blackboard work, 62; telling, 49; topical discussion, 27; seat work, 23; reading of text and discussion, 22; demonstration and laboratory, 21; criticism of work previously prepared by the class, 16; oral drill, 19; translation, 12; class reports, 10; taking notes and dictation, 8.

4. What were the outstanding characteristics of the questions used?

Thought stimulating, 96; memory testing, 81; many "yes and no" questions, 62; questions clear cut and direct, 64; vague and indefinite, 17; many questions suggesting their own answer, 6; stereotyped form of question, 4; questions answered by the instructor without giving the pupils an opportunity to answer, 5.

[1] In item 2 and the two following items the number of cases does not equal the total number of recitations observed, as more than one type was prominent in the course of the recitation period.

5. What fraction of the answers to questions were repeated by the instructor?

None, 110 recitations; less than one-half, 19 recitations; one-half or more, 50 recitations.

5 (*a*). What was the apparent purpose of the instructor in repeating the answers given by the pupils?

To emphasize the answer, 19; to amplify and develop answer, 12; to let rest of class hear the answer, 9; to put answer in better form, 6; merely a matter of habit, 5; for criticism of answer given, 3; to introduce the next question, 3; miscellaneous, 12.

6. What fraction of the class was called upon during the recitation?

None, 1 recitation; one-fourth, 19; one-half, 41; three-fourths, 30; all, 88 recitations.

6 (*a*). What fraction of the responses by pupils were satisfactory to the instructor?

None, 1 recitation; one-half, 48; three-fourths, 99; all, 31.

6 (*b*). How many failures on the part of the pupils to respond when called upon?

None, 51 recitations; one, 27 recitations; 2, 33 recitations; 3, 23 recitations; 4, 14 recitations; 5 or more, 31.

7. Were pupils encouraged during the recitation to contribute new material?

No, 138 recitations; yes, 41.

7 (*a*). To express views other than those of the text-book?

No, 147 recitations; yes, 32.

7 (*b*). Were pupils required to give facts supporting their answers?

No, 136 recitations; yes, 43.

8. What devices were used by the instructor to give concreteness to the work of the recitation?

None, 81 recitations; objects, 9; blackboard illustrations, 36; examples, 13; drawings, 12; maps, 7; applications to pupils' experiences, 21; specimens, 2; charts, 2.

9. Were any connections made during the recitation with other school subjects?

No, 162 recitations; yes, 17 recitations.

9 (*a*). Were any connections made with other things within pupils' experiences?

No, 129 recitations; yes, 50.

The types of connections made were: with home life, 6; with diet, 5; with village institutions, 4; with plants, fruits, and birds, 4; miscellaneous, occurring once each, 39.

10. Did the instructor attempt to arrive at conclusions during the recitation for which there was evident lack of facts in the possession of the pupils?

No, 126 recitations; yes, 53.

10 (*a*). What did the instructor do?

Told the class, 26 cases; accepted indefinite answers, 9 cases; left the point undeveloped, 7 cases; turned to the text, 6 cases; given as future problem, 3 cases; chided the class, 2 cases.

11. Did the recitation hold consistently to its purpose or was it rambling?

Consistent, 72 cases; very rambling, 27; rambling at times, 80.

12. What variety in procedure was used? [1]

The following five points on the conduct of the recitation treat only the 88 recitations in form or drill subjects or recitations in other subjects on phases emphasizing drill:

[1] See items 2 and 3, III.

13. Were the responses made by members of the class in the main accurate or inaccurate?

Accurate, 73 recitations; inaccurate, 15.

13 (*a*). Were the responses given by the pupils with confidence or with doubt?

With confidence, 50 recitations; with doubt, 38.

14. Were errors immediately checked up and pupils making them required to give correct responses?

Yes, 34 recitations; no, 54.

15. To what extent were the corrections made contributed by members of the class?

None or less than one-half, 34 recitations; one-half or more, 54.

16. Were the pupils given practice in applying known facts and principles to problems containing new elements?

Yes, 62 recitations; no, 26.

16 (*a*). In miscellaneous order?

Yes, 56 recitations; no, 32.

17. What fraction of the recitation was definitely given to drill?

None, 19 recitations; one-fourth, 13; one-half, 28; all, 28.

17 (*a*). Was the drill "snappy" or listless?

"Snappy," 30 recitations; listless, 39.

17 (*b*) Did the drill emphasize pivotal points in the work?

Yes, 37 recitations; no, 32.

17 (*c*). Was close attention given to accuracy?

Yes, 32; no, 37.

17 (*d*). Was attention given to speed?

Yes, 8; no, 61.

17 (*e*). To what extent was time spent in drilling individual pupils upon items apparently known to the remainder of the class?

Five to 10 minutes, 6 cases; over ten minutes, 3 cases.

IV. General Observations on the recitation as a whole.

1. Was the attitude of the pupils attentive?

Yes, 132 recitations; no, 47.

1 (*a*). Orderly?

Yes, 134 recitations; no, 45.

1 (*b*). Indifferent?

Yes, 57 recitations; no, 122.

1 (*c*). What was the apparent cause of the indifference or disorderliness?

Lack of stimulation, 8 cases; formal, lifeless treatment of the subject, 12; no aim to the recitation, 9; general spirit of the school, 5; lack of preparation on the part of the pupils, 5; pupils uninterested in the subject, 4; instructor took up all the time, 4; nothing for pupils to do, 5; no organization of the work, 2; no respect for the instructor, 1.

2. Were desirable habits of work emphasized? punctuality in assigned work?

Yes, 136 recitations; no, 43.

Neatness?

Yes, 145; no, 34.

Thoroughness?

Yes, 143 recitations; no, 36.

Responsibility on part of pupils?

Yes, 49; to some degree, 90; no, 40.

3. Were pupils in the process of the recitation frequently interrupted?

By other pupils?

Yes, 21 recitations; no, 138.

By the instructor?

Yes, 51 recitations; no, 128.

3 (*a*). What was the apparent purpose on the part of the instructor?

To make corrections, 16 recitations; to ward off incorrect answers, 7; to complete answers, 8; to make fickle remarks, 9; to stimulate to study, 3; to insist upon accuracy, 2; to hurry up pupils, 2; to interpret answers, 2; to exhort pupils, 2.

4. What fraction of the recitation was consumed by the instructor talking?

Practically none, 11 recitations; one-fourth, 78; one-half, 51; three-fourths or more, 39.

4 (*a*). To what end?

Keep the recitation moving, 8 cases; elaborate upon the pupil's replies, 22; to make corrections, 19; to give directions, 24; to give explanations, 34; to supply information, 13; to draw out pupils, 4; to criticize pupils, 4; to give rambling dissertations, 4; to interpret, 2.

5. What fraction of the recitation did the instructor remain seated at his desk?

None, 126 recitations; one-fourth, 3; one-half, 9; three-fourths, 5; the whole time, 36.

6. Did the instructor give evidence of adequate preparation for the lesson?

Yes, 149 recitations; no, 30.

The pupils?

Yes, 122 recitations; no, 57.

7. What use did the instructor make of the text-book?

The only guide for the recitation, 55 recitations; sole basis for the assignment, 132; the guide for questions, 34; read from the text-book, 13; referred to the text-book as the authority, 7.

8. What fraction of the class were kept occupied during the recitation?

None, 6 recitations; one-fourth, 34; one-half, 20; three-fourths, 14; all, 103.

9. Were the Regents mentioned in the conduct of the recitation?
Yes, 29 recitations; no, 150.[1]

9 (*a*). How?
Regents Review books used as basis of preceding assignment, 17 cases; basis of questions asked in recitation, 9; to stimulate study, 2.

10. What points in the recitation stood out in the mind of the observer as having been adequately developed during the recitation?
One or more points, 124 recitations; none, 55 recitations.

11. In the opinion of the observer what was the strongest feature of the recitation? the weakest?

The strongest feature as reported by the observers:

Insistence upon accuracy and thoroughness, 40 recitations; stimulating the interest of the pupils, 19; the enthusiasm of the instructor for his work, 21; good class discussions, 16; skill in conducting drill, 14; skill in the development of the lesson, 10; good organization of the recitation, 14; use of the pupils' experiences, 8; skilful emphasis upon pivotal points in the lesson, 7; instructor's mastery of the subject, 7; the patient, sympathetic attitude of the instructor, 6; a good assignment, 6.

The weakest feature as reported by the observers:

"Teacher did everything," 29 recitations; no phases of the lesson given any particular emphasis, 14; no organization of the lesson material, 14; entire lack of responsibility upon the part of the pupils, 22; dead, formal treatment of the subject-matter, 12; treatment of a great mass of details in unrelated fashion, 9; listless catechism, 5.

Other weakest features reported a few times each were: emphasis upon the mere acquisition of facts; no definite aim or objectives; teacher did all the thinking; pupils spoke in very low and indistinct tones; short, fragmentary answers; poorer pupils neglected; poor assignment; no guiding problems; many inaccuracies; rambling diffuseness; lack of definite accomplishment; and bookish abstractions.

[1] These figures are exclusive of those given in reference to the assignment.

V. Critical Comments

The critical comments made by the several observers add but little to the material already gained but rather emphasize the main characteristics as indicated in the preceding divisions of the observations. The most frequent critical comments were: the presentation was formal; there was lack of definite organization of subject-matter and of procedure; there was no definite aim to the teaching; the attitude of the pupil was that of indifference; the work of the class room was slow and listless; the work of instruction was abstract and bookish; no emphasis was given to any particular topics or problems; there was a failure to clinch the points made; the pupils showed lack of initiative; no responsibility was thrown upon the pupils; mere text-book work; there was no supplementary reading.

General Summary of Class-room Teaching

Class Routine.—With regard to class routine the following were the outstanding characteristics as reported by the observers. The high school instructors observed wasted practically no time in beginning the work of the recitation, approximately 57 percent entering immediately into the work. Another 37 percent spent three minutes or less in getting ready for the lesson. In 57 percent of the recitations no materials other than the text-book were used. In the 80 recitations where other materials were employed, they were systematically and economically handled in 85 percent of the cases. In 61 percent of the recitations the conditions were favorable for work, and in 24 percent they were decidedly unfavorable. In 15 percent of the recitations the conditions for work were fair, with hindering features.

Assignment and Study Guidance.—There was considerable variation in the practice of the instructors observed as to the time of making the assignment. The most common practice was to make it at the end of the recitation period, this being done in 55 percent of the recitations. The next most common place was at the beginning of the recitation, where it was made in approximately 29 percent of the cases. One of the most striking facts with respect to the assignment was the little time given to it. Only one minute or less was

given to it in 48 percent of the recitations observed. In 35 percent of the recitations the time devoted to the making of the assignment was from one to five minutes. In only 28 percent was the assignment taken by the pupils in any written form, while in 16 percent it was checked in the text-book and in 56 percent no record of the assignment was made by the pupils. In 57 percent of the recitations the assignment made was vague and indefinite; in approximately 73 percent it was practically unmotivated. In 25 percent of the recitations where there was motivation, the motive for study was the impending Regents examinations. Including motivation

Diagram 14.—Time given to the making of the assignment of lessons. Percent of the 179 recitations studied

through local school examinations, the motivation was attempted through mention of examinations in 28 percent of the recitations observed.

In 73 percent of the cases the assignment was made in pages of the text-book only. Fifty-nine percent of the assignments were made with no guidance in the way of suggesting methods of attack, suggesting guiding topics, or by calling attention to important problems. Only rarely did the pupils enter into the making of the assignment by suggesting problems and topics of interest to them. In only 5 percent of the assignments observed were references given

to supplementary reading. Differentiation as to work for individuals or groups was made in the assignment in 3 percent of the recitations.

All data on the assignment indicate that it is one of the weak features in the class-room work in the rural high school. While a few instructors used it as a vital part of the teaching process, as a means of directing and stimulating interest in the work to be done, in the greater proportion of instances it consisted in indicating briefly the gross limits within which the task for the following day lay. It was vague and indefinite. In the main it was not made in sufficient detail to orientate or direct the pupils either through guiding topics or through the suggestion of vital problems tending to stimulate their intellectual curiosity.

The Conduct of the Recitation.—In the conduct of the recitation as concerned the lesson previously assigned there was much variation of method, with certain predominant characteristics. In 55 percent of the classes the aim of the lesson was fairly definite and in 45 percent it was vague and indefinite, in 26 percent of the cases being so indefinite as to be unrecognizable by the observer. In the majority of the recitations the aim of the lesson was remote and formal.

The four most frequent types of lessons observed were in the order of frequency: review of preceding work, prominent in 46 percent of the lessons; the catechizing on the lesson assigned for the day, used in 45 percent of the recitations; the development type, a prominent feature in 28 percent; and the drill type, occurring in 24 percent of the lessons observed.[1]

The procedure or method of attack was varied, more than one procedure being used during a lesson period in the majority of classes. The methods of attack used were in the order of their frequency: question and answer, blackboard work, telling or lecturing, topical discussion, seat work, reading of the text accompanied by discussion, demonstration and laboratory, criticism of work previously prepared by the class, oral drill, translation, class reports, and taking notes and dictation. The question and answer procedure

[1] In most cases the recitation was not a pure type, but during the lesson period changed from one type to another, so that most recitations represented at least two types.

was the outstanding method, being a prominent feature of 76 percent of the recitations observed. Blackboard work was second in frequency, occurring in practically one-third of the cases. The telling or lecture method of attack was used by instructors to a great extent in 27 percent of the recitations. Topical discussion and class reports were employed in 15 and 6 percent respectively.

The questions used by the instructors were about equally divided between the thought stimulating and the memory types. In approximately 35 percent of the recitations, many questions of the "yes or no" type were used. Approximately 40 percent of the questions used were clear and definite. A small proportion of the questions suggested their own answers; some were stereotyped in form; and approximately three percent of the instructors answered their own questions without giving the pupils an opportunity to respond. Thirty percent of the instructors repeated the answers given by pupils to from one-fourth to one-half of the questions asked. In 50 percent of the classes observed all the pupils were called upon, while in 29 percent only one-half or fewer of the pupils in the class were given an opportunity to recite.

During the recitation, in only 40 percent of the classes were pupils encouraged to contribute new material. In 35 percent of the classes the pupils were permitted to express views other than those of the text. In 60 percent of the recitations pupils were not required to give definite facts supporting their answers to questions asked.

The formal nature of much of the instruction observed is indicated by the following facts: In 45 percent of the recitations no devices were used to give concreteness to the class-room work. Objects were employed in five percent of the classes; maps in approximately four percent; and specimens and charts in three percent of the recitations. Eighty-nine percent of the recitations contained no references to other school subjects and 72 percent made no connections with other things within the pupils' experience.

In the teaching of form or drill subjects, or form phases of other subjects, 88 recitations were observed. In practically 83 percent the responses made by the pupils were in the main accurate and in 17 percent of the classes inaccurate. In approximately 57 percent the responses were given by the pupils with confidence and in 43

percent with doubt. In 38 percent of the recitations, when errors were made in the replies of pupils, they were immediately checked up and the pupil who made the error was required to make the correct response; in the other 62 percent the pupil was left, having made only the incorrect response. In 38 percent of the recitations, one-half or fewer of the corrections were made by members of the class. The pupils were given practice in applying known facts and principles to problems containing new elements in 70 percent of the 88 classes and to new elements in miscellaneous order in 63 percent. In 56 percent of the recitations in which all or a portion of the period was devoted definitely to drill, the drill work was listless; in the other 44 percent it was "snappy." In 46 percent of the form type of lessons observed with time definitely given to drill accuracy was stressed while speed was given attention in less than 11 percent of the classes. In approximately 54 percent of the classes with definite drill work pivotal points in the lesson were emphasized. In general the recognized principles of teaching the form or drill subjects were little followed by the rural high school instructors observed.

General Observations.—Under the heading "general observations" the observers of high school instruction gave attention to the broader and more comprehensive phases of the recitation, those things which characterized it as a unit of the educative process. The following give the main points as reported: The attitude of the pupils was attentive in approximately 74 percent of the classes observed and inattentive and indifferent in 26 percent. In one-fourth of the recitations the pupils were disorderly. The most frequent causes given by the observers for the disorderliness and indifference were: formal, lifeless treatment of the subject; lack of stimulation; lack of aim to the recitation; nothing for the pupils to do; instructor took up all the time; and lack of preparation on the part of the pupils.

Desirable habits of work were not emphasized in a rather large proportion of the classes. Punctuality in preparing the work of the assignment was not required in 24 percent of the classes; neatness of work was neglected in 19 percent, thoroughness was lacking in 20 percent; and in 22 percent of the classes observed no responsibility was thrown upon the pupil. In 50 percent of the recitations,

from one-half to three-fourths or more of the period was taken up by the teacher talking. In 66 percent of the recitations the instructor gave evidences of preparation for the classroom work, and in the other 34 percent he had apparently made little or no preparation. The pupils were well prepared in 69 percent of the classes and unprepared in 31 percent. All the pupils were kept occupied in 57 percent of the classes, while in 22 percent one-fourth or fewer were kept occupied throughout the recitation. In over 30 percent of the recitations no important points in the lesson stood out in the mind of the observer as having been adequately developed, the work maintaining a dead level throughout the class period.

Many instances of teaching strong in certain respects were noted. The most frequently mentioned strong features of class-room work as reported were: insistence upon accuracy and thoroughness; stimulating the interest of the pupils; the enthusiasm of the instructor for his work; good class discussions; and skill in conducting drill. Other strong features not so frequently mentioned were: skill in the development of the lesson; good organization of the recitation; skilful emphasis upon pivotal points in the lesson; skill in the making of the assignment; instructor's mastery of his subject; use of pupils' experiences; and the patient, sympathetic attitude of the instructor.

The most common weak features of the work in the class room were: "the teacher did everything"; no phases of the lesson given particular emphasis: no organization of the lesson material as a teaching unit; lack of responsibility on the part of the pupils; dead, formal treatment of subject-matter; the treatment of a great mass of details in unrelated fashion; and listless questioning.

In conclusion, the following are some of the most prominent characteristics of the instruction as observed in the rural high schools. In the main the teachers showed a conscientious, earnest attitude toward their work. Many instances of teaching strong in certain respects were found. As a whole, however, the work of the class room was of a formal, abstract type. Few supplementary materials were used in the way either of readings or of devices to make teaching more concrete. But little use was made of the sources in the community available to the pupils. In the main the work lacked

definiteness and immediacy of aim, no real objectives standing out as the goals to be attained. Almost no use was made of the assignment as an integral part of the teaching process. The major part of the work might be characterized as informational, with emphasis upon the memorizing of a mass of material. Finally, the teaching on the whole was not of a type to stimulate pupils to initiative, to originality, to the evaluation of materials, or to the assuming of personal responsibility for results.

CHAPTER VII

THE CURRICULUM

Section 1.—The Existing Curricula

THE first part of the study of curriculum is devoted to the existing curricula in the rural high schools of the State. The data used as the basis for this phase of the study were derived from two sources: (1) statistics and reports of the State Department of Education; and (2) reports coming directly from principals of rural high schools. The first question considered is that of the present curriculum offerings.

Subjects Offered in the Rural High School.—The report of 609 rural high schools to the State Department for 1919–20 shows that practically all schools gave a year of English for each year of work offered and that 53 percent of them offered a course in English grammar and 4.3 percent a course in the history of English literature. Ninety-five percent of the schools gave first year Latin; 93 percent second year Latin; 56 percent third-year Latin; and 34 percent fourth-year Latin. Seventy-five percent gave French I, 69 percent French II, and over 13 percent French III. Ten percent offered Spanish I and eight percent Spanish II. Practically all schools gave elementary algebra; 65 percent intermediate algebra; 12 percent advanced algebra; 88 percent plane geometry; 21 percent solid geometry; and ten percent trigonometry. Over 91 percent of the schools gave elementary biology; 69 percent gave physics; and 24 percent chemistry. Physical geography was offered by over 17 percent of the schools and general science by three percent.

Seventy-eight percent of the schools gave ancient history; 36 percent the history of Great Britain and Ireland; eight percent modern history; 76 percent American history; and over 88 percent

TABLE 62.—SUBJECTS OFFERED BY 609 RURAL HIGH SCHOOLS IN 1919–1920

Size of school....	1–49 pupils	50–99 pupils	100 and over	Total	Per-cent[1]	Size of school.....	1–49 pupils	50–99 pupils	100 and over	Total	Per-cent[1]
English I.....	330	180	97	607	99.6	Anc. Hist., 3 hrs.....	25	12	3	40	6.6
English II.....	319	180	97	596	97.8	Anc. Hist., 5 hrs.....	219	134	80	433	71.1
English III.....	275	178	97	550	90.3	Hist., G. Britain, 3 hrs.	10	7	5	22	3.6
English IV.....	231	178	97	506	83.1	Hist., G. Britain, 5 hrs.	94	59	42	195	32.0
English Grammar...	118	149	56	323	53.0	Mod. History, 3 hrs..	12	7	10	29	4.8
History, Eng. Lit....	7	13	6	26	4.3	Mod. History, 5 hrs..	3	9	6	18	2.9
Latin I.....	302	180	97	579	95.1	American History...	198	172	94	464	76.2
Latin II.....	289	180	97	566	92.9	Civics.....	273	170	96	539	88.5
Latin III.....	123	130	89	342	56.1	Economics.....	12	4	5	21	3.4
Latin IV.....	60	70	79	209	34.3	Ele. Bookkeeping...	24	50	53	127	20.8
French I.....	209	156	94	459	75.4	Adv. Bookkeeping...	6	13	15	34	5.6
French II.....	177	156	89	422	69.3	Commercial Arith...	44	61	48	153	25.1
French III	29	29	24	82	13.4	Commercial Law....	7	4	8	19	3.1
French IV.....	6	2	8	16	2.6	Commercial Geog....	54	58	31	143	23.5
German I.....	..	4	2	6	1.0	Commercial English.	11	14	6	31	5.1
German II.....	..	20	9	29	4.8	Business writing....	43	48	47	138	22.6
German III.....	..	15	8	23	3.8	Shorthand I.....	13	35	45	93	15.3
Spanish I.....	21	25	18	64	10.5	Shorthand II.....	10	22	21	53	8.7
Spanish II.....	15	19	15	49	8.0	Typewriting.....	15	42	43	100	16.4
Spanish III.....	..	3	..	3	0.5	Elementary Design..	88	117	73	278	45.6
Elementary Algebra..	327	180	97	604	99.1	Ele. Representation..	110	120	70	300	49.2
Intermediate Algebra	157	148	89	394	64.7	Inter. Drawing.....	9	14	21	44	7.2
Advanced Algebra...	11	62	..	73	11.9	Ele. Mech. Drawing.	31	41	43	115	18.9
Plane Geometry.....	297	143	97	537	88.2	Adv. Mech. Drawing	2	4	5	11	1.8
Solid Geometry.....	44	41	45	130	21.3	Wood Turning.....	..	2	..	2	0.3
Trigonometry.....	6	28	26	60	9.8	Machine Shop.....	1	..	..	1	0.2
Physics.....	197	144	79	420	68.9	Agriculture I.....	6	26	16	48	7.9

Chemistry	33	54	61	148	24.3	Agriculture II	7	12	12	31	5.1
Applied Chemistry	5	2	2	9	1.5	Agriculture III	5	19	11	35	5.7
Biology	293	169	94	556	91.3	Agriculture IV	1	8	7	16	2.6
Advanced Biology	2	..	..	2	0.3	Homemaking I	11	30	27	68	11.1
Elementary Botany	16	8	4	28	4.6	Homemaking II	11	25	20	56	9.2
Elementary Zoology	9	3	..	12	1.9	Homemaking III	7	17	20	44	7.2
Physiology	22	8	6	36	5.9	Homemaking IV	5	8	9	22	3.6
Physical Geography	50	30	26	106	17.4	Chorus Singing	24	69	50	143	23.5
General Science	11	2	4	17	2.8						

[1] The percentages of all subjects are computed on the basis of the total number of schools. For all subjects taught in years other than the first the percentages given are lower than would be the case if computed on the basis of schools actually offering second-year work, third-year, etc. The basis used shows, however, the percentage of schools offering the pupil the opportunity of pursuing the particular subject.

gave civics. Three percent gave economics, and none offered sociology. Commercial subjects, such as commercial arithmetic, geography, elementary bookkeeping, shorthand, typewriting, and business writing, were offered in from 15 to 25 percent of the schools. Approximately one-half of the schools gave courses in drawing and 19 percent offered mechanical drawing. Agriculture was taught in eight percent of the schools and homemaking in 11 percent.

Required Subjects.—Three hundred and eighty-five schools reported as to the subjects required of all pupils. All of those

Table 63.—Subjects Required of All Pupils as Reported by the Principals of 385 Rural High Schools

Type of schools	1–49 pupils less than 4 years of H. S. work	1–49 pupils 4 year schools	50–99 pupils	100–149 pupils	150 or more pupils	Total	Per-cent of total	Per-cent excluding schools doing less than 4 years' work
Eng. (each year)	52	159	106	45	23	385	100.0	100.0
Latin I	31	78	21	11	..	141	36.6	33.0
Latin II	27	75	21	9	..	132	34.3	31.5
Latin III	..	20	4	..	..	24	6.2	7.2
Latin IV	..	10	4	..	..	14	3.6	4.2
French I	15	56	15	8	..	94	24.4	23.7
French II	12	55	15	7	..	89	23.1	23.1
Ele. Algebra	51	159	105	41	21	377	97.9	97.9
Int. Algebra	7	26	9	6	3	51	13.2	13.2
Plane Geometry	43	154	102	41	21	361	93.8	95.5
Ancient History	29	101	56	15	11	212	55.0	54.9
Modern History	9	30	18	3	2	62	16.1	15.9
American History	20	159	106	45	23	353	91.7	100.0
Civics	44	150	106	44	22	366	95.1	96.7
Biology	48	156	104	37	19	364	94.5	94.9
Botany	1	..	..	..	..	1	0.3	..
Physics	10	120	63	20	11	224	58.2	64.2
Chemistry	..	..	5	..	..	5	1.3	1.5

replying required English each year. Almost 37 percent required Latin I and over 34 percent Latin II. A small number of schools required Latin III and IV. About one-fourth of the schools required two years of French. Ninety-eight percent of the schools reporting required elementary algebra; 13 percent intermediate algebra; and 94 percent plane geometry. Ancient history was a required subject in 55 percent of the schools; modern history in 16 percent; American history in 92 percent, and civics in 95 percent. Biology was required by 95 percent of the schools, physics by 58 percent, chemistry by 1.3 percent and botany by one school.

Excluding from the total number of schools reporting the 52 schools doing less than four years of high school work, and computing the percentages on the basis of the 333 four-year schools, changes the percentages but little. It lowers the percentages in Latin I and Latin II, approximately 3 percent each, and increases slightly the percentages in respect to Latin III and IV. The percentage requiring physics is raised from 58 percent to 64 percent. All the four-year schools required American history and practically all required civics.

Subjects Offered as Electives in 385 Rural High Schools.—The same schools reporting on subjects offered as electives show that beyond the more formal subjects usually regarded as college preparatory there is little or no opportunity for election in the rural high schools. A pupil who does not expect to go to college cannot get in the rural high school, in the majority of cases, subjects of more immediate value to him than those taught primarily to satisfy college requirements. The electives are in the main in the foreign languages, in advanced mathematics, in physics and chemistry, and in ancient and modern European history. Approximately four percent of the 385 schools reporting offered economics as an elective, 18 percent offered commercial arithmetic and commercial geography. Seven percent offered mechanical drawing and 14 percent elementary drawing. Other subjects mainly of the commercial type were offered by a small proportion of schools. Agriculture and homemaking were offered by 10 and 9 percent respectively of the schools reporting.

TABLE 64.—SUBJECTS OFFERED AS ELECTIVES AS REPORTED BY THE PRINCIPALS OF 385 RURAL HIGH SCHOOLS

Type of high school	1–49 pupils	50–99	100–149	150 and over	Total	Percent	Type of high school	1–49 pupils	50–99	100–149	150 and over	Total	Percent
Latin I	105	85	30	23	243	63.1	American History	14	2	..	..	16	4.1
Latin II	104	85	33	23	245	63.6	World History A	15	11	5	2	33	8.6
Latin III	127	91	34	23	269	69.9	World History B	12	10	4	2	28	7.3
Latin IV	79	82	35	23	219	56.9	World History C	3	3	2	1	9	2.3
French I	107	82	34	23	246	63.9	History of Great Britain	3	..	..	..	3	0.8
French II	103	82	34	23	242	62.8	Economics	9	4	1	..	14	3.6
French III	68	11	24	18	121	31.4	Commercial Arithmetic	22	28	12	6	68	17.7
Spanish I	14	18	7	11	50	13.0	Commercial Geography	27	27	8	8	70	18.2
Spanish II	13	18	7	11	49	12.6	Commercial Law	2	1	1	3	7	1.8
Spanish III	..	..	1	..	1	0.3	Shorthand I	2	19	9	6	36	9.3
German I	16	11	4	4	35	9.0	Shorthand II	2	9	2	1	15	3.8
German II	16	11	4	4	35	9.0	Bookkeeping I	9	20	11	7	47	12.2
German III	4	7	2	2	15	3.8	Bookkeeping II	3	9	2	2	16	4.1
English Grammar	20	17	3	1	41	10.6	Typewriting	4	17	9	6	35	9.0
Elementary Algebra	3	1	2	1	7	1.8	Stenography I	..	..	..	5	5	1.3
Intermediate Algebra	127	85	32	17	261	67.8	Business Writing	12	17	8	4	41	10.6
Advanced Algebra	22	34	18	12	86	22.3	Drawing I	23	18	6	5	52	13.6
Plane Geometry	5	6	2	3	16	4.1	Drawing II	..	2	2	1	5	1.3
Solid Geometry	60	69	26	18	173	44.9	Design	9	13	9	2	33	8.6
Plane Trigonometry	5	7	5	2	19	4.9	Mechanical Drawing	5	13	7	2	27	7.0
Physics	53	57	23	16	149	38.7	Representation	12	14	8	3	37	9.6
Chemistry	44	56	23	18	141	36.6	Joinery	1	..	1	..	2	0.5
Biology	6	4	4	2	16	4.1	Agriculture I	8	20	5	4	37	9.6
Botany	7	8	3	1	19	4.9	Agriculture II	7	19	5	3	34	8.8
Zoology	8	8	2	1	19	4.9	Agriculture III	3	18	4	3	28	3.7
Physical Geography	26	15	7	1	49	12.6	Agriculture IV	3	17	4	3	27	7.0
History, Eng. Lit.	..	2	1	..	3	0.8	Home Economics I	8	17	4	5	34	8.8
Civics	8	1	..	..	9	2.3	Home Economics II	7	15	3	2	27	7.0
Ancient History	49	37	19	12	117	30.4	Home Economics III	1	13	1	2	17	4.4
Modern History	58	50	15	11	134	34.8	Home Economics IV	1	11	..	..	12	3.1

Percent of Pupil's Time Devoted to Various Subjects.—A study of 184 rural high schools chosen at random from the schools of each class on the basis of number of pupils enrolled indicates that on the average the pupil's time and energy are given in approximately the following percents to the various subjects. These percents are computed on the basis of all pupils actually enrolled in each subject in the 184 schools, taking into account the number of periods given each subject per week and estimating each pupil's program as being four subjects a day. These percentages do not show the variation among different schools but do undoubtedly indicate approximately the relative amount of emphasis given the various subjects in the rural high schools as a whole.

Percentage of pupil's time given to various subjects throughout the high school course:

	Percent
English	23.67
Latin	13.01
French	6.74
Spanish	0.89
Mathematics	17.68
Physical sciences (physics and chemistry)	2.91
Physical geography	0.70
Biological sciences (biology, botany, zoology, physiology)	7.66
Foreign history	5.86
American history and civics	6.01
Economics	0.06
Sociology	..
Study of occupations	..
Agriculture	1.30
Homemaking	1.67
Mechanical drawing, wood-turning, machine shop	0.48
Commercial subjects	5.99
Miscellaneous subjects	5.37

The above data indicate that on the average over 44 percent of the pupil's time is given to the study of languages including English, or almost 21 percent excluding English. In other words, over one-fifth of all the time the rural boy or girl spends in high school is devoted to the study of a foreign language. Almost 18 percent of his time is given to mathematics as compared with 11.27 percent given to all the other sciences. In other words, he gives more time to the study of mathematics than he gives to the natural sciences and the social sciences, including American history and civics, but

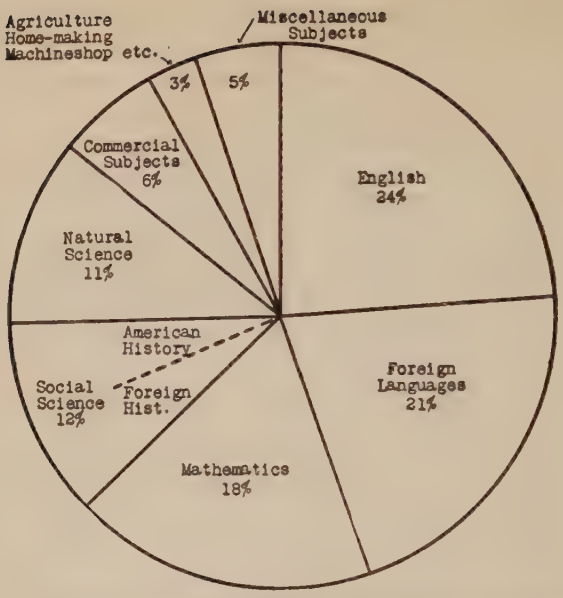

Diagram 15.—Percent of pupil's time given to various subjects throughout the high school course

excluding foreign history. He gives as much time to the study of foreign languages as he gives to natural sciences, agriculture and the social sciences, excluding foreign history.

Activities Engaged in by Recent Rural High School Graduates.—Another angle from which to judge the curriculum of the rural high school is through a study of the activities in which its graduates engage. This question was asked of the high school principals and 270 replied in detail. This item gives the type of activity engaged in in the spring of 1921 by 2,683 graduates of the two preceding years. Combining the figures for the two years shows that approximately two percent were married. Five and four-tenths percent were at home, 18.2 percent teaching in rural schools, 11.7 percent in business, 1.9 percent nursing, 2.3 percent in the trades, and 3.5 percent farming. Practically 28 percent were in college, 22.5 percent in a normal school, and 4.5 percent were engaged in various other types of activities.

TABLE 65.—ACTIVITIES ENGAGED IN IN 1921 BY 2,683 RURAL HIGH SCHOOL GRADUATES OF 1919 AND 1920, AS REPORTED BY THE PRINCIPAL

Type of activity	Schools with 1–99 pupils			Schools with 100 or more pupils			Grand total	Per-cent
	1919	1920	Total	1919	1920	Total		
In college	191	202	393	180	177	357	750	27.9
In normal school	129	247	376	77	150	227	603	22.5
Teaching	138	153	291	106	92	198	489	18.2
In business	109	81	190	75	48	123	313	11.7
At home	35	71	106	13	25	38	144	5.4
Farming	35	36	71	13	10	23	94	3.5
In a trade	24	31	55	..	6	6	61	2.3
Married	25	14	39	7	10	17	56	2.1
Nursing	20	11	31	10	10	20	51	1.9
Miscellaneous	20	29	49	36	37	73	122	4.5

These returns indicate that the majority of the graduates of the rural high schools do one of four things: go to college, to a normal school, teach in the rural schools of the State, or enter business. They indicate that about nine of each one hundred of the boys who graduate from the high school take up farming. A significant fact to be noted here is that, while the curricula of the rural high school and the standards set up are designed primarily for preparation for college, only approximately one-third of the graduates enter college. Keeping in mind that one-third or less of those who enter the rural high school graduate, it is evident that the work of the school at the present time in the main is of a nature suited to meet more or less directly the needs of only one out of nine of the pupils who enter upon a high school course. Conceding that a curriculum emphasizing foreign languages and mathematics best meets also the needs of those going to normal schools, which is very doubtful, it is meeting directly the requirements of only 50 percent of its graduates or one out of every six of the pupils who begin high school work. Recognizing also the fact that the proportion of high school graduates going on to higher institutions has very materially increased in the past decade and will probably continue to increase, nevertheless it seems safe to conclude that the curricula as constituted at present

would be adapted at best to but a minority of the pupils entering the rural high school. This conclusion seems justified since the proportion of pupils graduating from high schools as compared with the number entering has changed but very gradually over a considerable period of years.

It seems clear that the rural high school must always keep the door of opportunity open for those pupils planning to continue their training in higher institutions. It seems equally clear that this should not be done by neglecting the needs of the great majority of pupils who cannot or do not continue their school training beyond one or more years in the high school. At the present time the work offered in the first two years of the rural high school curriculum is almost entirely limited to subjects required for college entrance.

The Adaptation of the Curriculum Elements to the Pupil as Indicated by the Percentage of Failures

One of the principles underlying all modern education is that the curriculum elements and the standards of achievement set up should be suited to the needs and abilities of the pupil. Applied to secondary education, this means that the work of the secondary school should be adapted to the abilities of the pupils of secondary school age who have completed the work of the elementary school. Conservatively speaking, the public high school particularly has as its responsibility the serving of the educational needs of all persons of high school age who have completed the elementary school. It must, if it is to meet its objectives, select by differentiation and not by elimination.

The study of the curriculum content of the rural high school shows that it is designed primarily to prepare pupils for college. Its program of studies in the main contains only the older, more traditional, college preparatory subjects and only in a small degree the newer college preparatory studies. The data on the percentage of failures in the various academic subjects over a period of twelve years indicate that the standards of achievement set in these subjects are not suited to the maturity and abilities of the pupils in the rural high school. Table 66 gives the percentage of pupils failed in eight academic subjects over a period of twelve years. Table 69

TABLE 66.—PERCENT OF PUPILS FAILED BY TEACHERS AND REGENTS OF ALL THOSE TAKING THE EXAMINATION, 1907–1918. (a) IN EIGHT SUBJECTS COMMONLY TAUGHT IN THE RURAL HIGH SCHOOL; (b) AVERAGE PERCENT FAILED IN ALL SUBJECTS[1]

(a)	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	Average 1907–18
English II	29.7	19.6	12.3	6.3	8.8	12.2	22.0	19.2	17.3	23.2	30.4	26.1	18.9
English III	26.6	24.8	15.2	14.8	21.1	15.2	21.9	24.4	25.2	24.3	27.6	18.8	21.7
English IV	12.6	9.4	7.0	12.6	18.7	15.2	10.7	8.4	7.8	10.0	17.4	21.1	12.6
Latin II	21.0	39.7	26.9	27.5	38.3	41.8	40.3	27.5	34.5	31.4	27.4	27.4	32.0
Elementary Algebra	15.5	35.8	25.6	38.6	26.6	32.4	28.5	35.4	41.3	32.3	29.6	30.6	31.0
Biology	9.3	12.1	15.3	19.6	17.1	11.1	24.6	35.8	26.5	19.3	28.2	31.0	20.8
Ancient History	31.2	21.2	25.6	34.3	32.0	30.4	28.6	23.6	22.6	19.8	28.8	29.0	26.6
American History	24.8	21.8	22.6	27.4	19.1	25.6	13.0	19.7	24.2	23.6	15.3	12.0	20.8
(b) Average for all subjects	25.5	30.0	27.1	29.8	25.5	28.9	28.8	30.2	28.8	24.1	34.1	26.3	28.8

[1] Compiled by Mr. T. L. Bayne from a study by Superintendent W. H. McClelland, Perry, N. Y. See Volume II, Administration and Supervision.

TABLE 67.—SUBJECT FAILURES IN 30 CONNECTICUT HIGH SCHOOLS[1]

Subject	Percent failing	Subject	Percent failing	Subject	Percent failing	Average percent failing
English	17.5	Geometry	26.4	Ancient History	19.3	18.9
Latin	10.1	General Science	27.5	American History	13.0	..
French	21.0	Biology	9.0	Typewriting	22.7	..
German	17.6	Chemistry	36.0	Shorthand	13.0	..
Algebra	17.3	Physics	16.3	Bookkeeping	16.8	..

[1] Study by O. J. Moulton. Reported in: A Survey of the Organization and Administration of High Schools in the State of Connecticut, by Jesse B. Davis, 1921, p. 25.

TABLE 68.—PERCENT OF PUPILS FAILING IN 15 SUBJECTS IN 75 WISCONSIN HIGH SCHOOLS[1]

Subject	Percent failing	Subject	Percent failing	Subject	Percent failing
English 1	10.0	German 1	10.0	Phys. Geog.	10.0
English 2	7.0	German 2	5.0	Anc. History	10.0
English 4	3.0	Algebra	14.0	Cooking	2.0
Latin 1	12.0	Geometry	13.0	Sewing	2.0
Latin 2	7.0	Physics	3.0	Manual Training	3.0

shows the percentage of pupils failed in the eight academic subjects, based on a study of approximately 1000 pupils, a random selection for each subject in June, 1920.

The data referred to show that taken over the twelve year period the lowest average percentage of failure was in English IV with 12.6 percent. The highest percentage of failure was in second year Latin, with an average of 32 percent, and the second highest in elementary algebra, with 31 percent. A significant fact is that the average percentage of pupils failed for the twelve years 1907–1918 in all academic subjects was 28.8 percent.

A study of the distribution of rural high school pupils in eight academic subjects on the basis of grades received in the Regents examinations in June, 1920, shows a similar high percentage of failure. It also shows that over one-third of the pupils who passed received grades between 60 and 69, 60 being the passing mark. (Table 69.)

It should be noted also that the data presented do not give a complete picture of the conditions as they exist. The figures given show only the percentage of pupils failing who have been admitted to the examinations. A considerable percentage of pupils who have taken the work in the various subjects are not permitted by the local authorities to take the Regents examinations. It is the general practice in the rural high schools to admit to the examinations

[1] Janet R. Rankin: A Study of Students Dropped, Failed and Promoted in High School Subjects, Educational Administration and Supervision, Vol. 3 p. 15, 1917.

TABLE 69.—THE DISTRIBUTION OF RURAL HIGH SCHOOL PUPILS IN EIGHT ACADEMIC SUBJECTS ON THE BASIS OF GRADES RECEIVED IN THE REGENTS EXAMINATIONS IN JUNE, 1920. (BASED ON THE GRADES OF APPROXIMATELY 1,000 PUPILS IN EACH SUBJECT)[1]

Subject	Percentage of pupils receiving grade indicated				
	Failed	60–69	70–79	80–89	90–100
Biology	47	41	9	2	1
Elementary Algebra	38	24	17	13	8
English II	26	36	26	11	1
English III	17	35	32	14	2
English IV	9	31	35	21	4
Latin II	34	37	18	9	2
Ancient History	21	38	23	13	5
American History	14	35	32	16	3

only those pupils whose record for the term is of such a character as to indicate their successful completion.

Any system of public high schools failing through a system of examinations on an average more than 28 out of every 100 pupils enrolled in its academic subjects over a period of twelve years should be viewed with much concern. It would seem that such a high percentage of failures, together with the fact that a large percentage of the successful pupils crowd close about the passing standard, indicates clearly the need of a careful study of the existing aims, curriculum content and organization, and standards of achievement of the rural high school. It should be examined minutely in the light of the interests, abilities and life purposes of the pupils for whose training it should exist. Granting that the results of the present system are the selection and preparation of a superior group of individuals for college work, these results would seem to be attained at too great a cost.

THE STATE SYLLABI FOR SECONDARY SCHOOLS.—The replies of rural high school instructors to the question as to their use of the State syllabi in the various subjects indicate that over 80 percent of them follow the syllabi to the letter or very closely. Less than 20 percent of the teachers reporting use them only as a guide in organ-

[1] From a study by T. L. Bayne, graduate student, Cornell University.

izing their work. The facts obtained through the observation of high school instruction and through the visitation of rural high schools and conferences with high school principals and teachers agree with the preceding statements. The fact that the subject matter of the rural high school is so largely determined by the syllabi makes important the question as to the nature and content of the syllabi and their suitability to the needs of the pupils and teachers of the rural high school.

A critical study of the secondary school syllabi now in use shows that they are of two general types: The *first type* consists only of a brief outline of the subject matter, with little or no suggestion as to the aims and objectives desirable. In this type practically no hints as to methods of presentation or as to supplementary sources and materials are given. No indication as to the relative values of the various elements of the course is offered and no optional or alternative topics of study are suggested. The *second type* of syllabus differs from the first in that it suggests more or less adequately desirable aims in the teaching of the subject: offers suggestions as to methods of presentation: suggests sources of materials and other educational means: and in some cases gives required, alternative, and optional topics and problems. Examples of syllabi belonging entirely or largely to the first type are those in mathematics, the physical sciences, manual training, the modern foreign languages, and civics. Examples of the second type are the syllabi in biology, drawing, English, history, and Latin.

Since these syllabi are the teacher's courses of study in the rural high schools, some of them are considered in detail with reference to certain desirable characteristics of a State course of study. A State course of study, or syllabus, in any secondary school subject should:

1. Give the aims and objectives (purposes) of the course.

2. Suggest the best methods of teaching the subject and furnish the teacher with a selected list of references on the teaching of the subject in question.

3. Give the principles underlying the selection and organization of subject matter in secondary school subjects and the specific principles pertaining to the subject.

4. Give the subject matter of the course grouped about the im-

portant general topics (with required, alternative, and optional topics and problems).

5. Give suggestions for the adaptation of subject matter to different types of schools under differing local conditions.

6. Give definite references to sources of data, study materials and readings suited to the maturity and training of the pupils for whom it is intended.

7. Suggest the time to be given to the study and the possible variation as to year in which it is to be offered.

Civics and Physics as Examples of Type One.—The syllabi in civics and physics are taken as examples of type one and are analyzed in the light of the desirable characteristics given above.

(*a*) The syllabus in civics contains no definite analysis of the aims and objectives of the course. It does not suggest desirable methods of teaching the subject beyond a brief statement on the preliminary approach, and a suggestion as to the desirability of securing the coöperation of local officials. It offers no references to discussions of objectives, choice and organization of subject matter, or methods of teaching as an aid to the instructor. Beyond a brief general discussion on the desirability of proceeding from local to other types of civic institutions, there are no definite suggestions as to the special principles underlying the selection and organization of subject matter in civics. In the body of the syllabus the topics to be studied are arranged under their appropriate headings as the school district, the town, the village, the city, etc. No indication is made, however, as to the relative importance of the various topics for different types of communities nor is any division made as to required, alternative, or optional topics. No concrete suggestions for the adaptation of subject matter to the different types of schools are offered other than the statement: "In the city, municipal government, and, in the country, the government of the school district and the township should first be studied." Finally, the syllabus in civics gives no references to sources of facts, study materials, or readings.

In conclusion, the syllabus in civics lacks in large part those characteristics which would make it adaptable and most useful in rural high schools. The contacts of rural pupils with the local, State, and national civic agencies, both voluntary and governmental, are so

different from the contacts of urban pupils that the effective training of either in this subject would seem to demand extensive adaptation of subject matter. Not only are the voluntary agencies existing for the promotion of community welfare in the country in the main different from those in the city, but the local governmental agencies also are different. The rural community also comes more directly in contact with certain phases of State and national government than does the urban community, and is served particularly by certain departments, as the United States Department of Agriculture.

The syllabus gives no attention to the various rural organizations, as the Farm and Home Bureaus, the Grange or other organizations important in rural communities.

(*b*) The syllabus on physics gives no concrete statements as to the aims and objectives which should guide the work in physics. No suggestions are made as to the methods found effective in teaching physics to high school pupils, nor references for the teacher on the teaching of the subject. It contains no adequate discussion of the principles pertaining particularly to physics. The body of the syllabus gives only the list of topics "deemed fundamental" to the course. No alternative or optional topics are indicated. No concrete suggestions are made for adapting the teaching of physics to the needs and experiences of pupils of different community environments or to groups of pupils of differing needs. No references to sources of information adapted to the abilities and interests of high school pupils are made. The syllabus on physics is, in short, a brief outline of a very formal traditional type.

English and Biology as Examples of Type Two.—The syllabi on English language and literature and on biology belong in the main to type two and are analyzed in the light of the characteristics suggested. (*a*) The English syllabus begins with a sentence of great importance as bearing upon the question of State syllabi: "As this syllabus is designed for schools working under widely varying conditions, it is expected that each school, with this as a basis, will work out a detailed syllabus for itself, indicating the specific work for each half year." Throughout, the syllabus shows the desirable tendency to break away from the formality so common in secondary school English and in general agrees with the point of view presented in the

Report on Reorganization of English in Secondary Schools by the National Joint Committee on English.

It gives in some detail the aims and objectives in teaching English literature and expression (oral and written) in secondary schools and indicates in a general way phases to be emphasized in different years. It contains a brief discussion as to desirable methods of instruction, but suggests no concrete references for aiding the teacher. It does not give any principles underlying the selection and organization of subject matter for secondary schools, but does indicate some of the principles applicable to the selection and organization of work in English literature and expression. Required and optional units of work are suggested. Groupings of subject matter as to types are made. The syllabus contains suggestions as to the adaptation of the work, especially in composition, to pupils of different environments and interests. Suggested lists of supplementary readings in literature, classified according to types, are given, and attention is called to the desirability of developing in pupils habits of reading contemporary literature in books and magazines. No references are indicated bearing upon oral and written expression. This would seem to be, particularly from the standpoint of the rural high school, a real weakness in the syllabus.

In general the State syllabus in English, with the exception of its lack of concrete suggestions as to professional references to aid the teacher and as to study references to aid the pupil in oral and written composition, seems suited to the needs of the rural high school. The failure to give any unit of time entirely to American literature would appear to be a weakness from the standpoint of the values of literature in relation to American citizenship.

(*b*) The syllabus on the biological sciences belongs in the main to the second type. Only the part dealing with elementary biology recommended as the beginning course in science for high schools is here considered. It is a general course, including plant, animal, and human biology. The emphasis of the course is largely upon the structural phases of biology, though the study of structure is linked up with the question of function. A considerable number of the topics touch upon the civic and economic bearings of biology though

these phases of the subject are not suggested as furnishing an angle of approach.

As to the aims and objectives of a beginning course in biology the syllabus suggests four general aims but makes no analysis of the special objectives to be used as the goals of instruction. A very brief discussion of methods of study and suggestions as to methods of teaching is given. The syllabus contains, however, no references to books or articles on the teaching of biology or its content and organization in secondary schools as aids for the teacher of the subject. Topics for study are given under the appropriate main headings and include prescribed, alternative, optional and suggested additional topics.

No definite suggestions for the adaptation of subject matter to different types of schools or communities are made other than that "each teacher is at liberty to select the divisions and the topics that can be studied to the best advantage and to consider them at the time of year when material is most easily obtained." The syllabus contains no references to sources of reading for the pupil.

In conclusion, the State syllabus on elementary biology has to a greater or less degree most of the characteristics of a good course of study, and should serve the needs of a well-trained teacher of the biological sciences working with good library and laboratory equipment. From the standpoint of the rural high school where the subject is often taught by an inexperienced and poorly trained teacher it is insufficient. For the average teacher of the rural high school it should contain concrete references to discussions on the principles of selection and organization of science materials for high school pupils and the most successful methods of presentation. More detailed and concrete suggestions are needed as to the objectives of science teaching, particularly a beginning science, in secondary schools, and as to the possibilities of its adaptation to different local conditions. It is especially weak in its failure to give a list of references to the rich mine of literature on the various phases of biology and its application to social and economic life.

A careful study of the teaching of biology in the rural high schools indicates that it is too frequently taught as a text-book subject with emphasis upon the memorization of classifications, definitions, and

structure. The high percentage of failures, particularly during the past eight years, indicates either that the standards of achievement set or the nature of the work required, or both, are not adapted to the ability of pupils in the first year of the rural high school.

The analysis of the existing State syllabi for secondary schools shows that they do not in general meet adequately the needs of the rural high schools comprising in number of schools approximately 80 percent of the high schools of the State. It is undoubtedly desirable that the State should offer syllabi for the rural high schools but these syllabi should be constructed with definite regard to the needs of the rural high school. They should serve as the basis upon which to build courses of study rather than as courses of study for the rural high schools.

Size of Classes.—The data from 184 rural high schools selected at random and representing schools of each type on the basis of number of pupils enrolled show that: the median class in schools with an enrolment under 50 has 6.8 pupils; the median class in schools with an enrolment between 50 and 99 has 11.6 pupils; and the median class in schools with over 100 pupils has 17.2 pupils.[1] These facts show that the smaller the schools the smaller are the classes. If the small rural high school is to offer a program of studies at all adequate to meet the demands of secondary education today, it is evident that the number of pupils in each class must always be less than in the larger schools. As a result the cost of instruction per pupil hour, assuming teachers equally well trained and paid, must be greater in the smaller schools.

A study of the question as to the size of classes in the various subjects shows that there is great variation. As would be expected, the classes in subjects offered in the upper years of the course are smaller than classes in subjects given in the first or second year. (See Table 70.)

Table 71 indicates the median size class in sixteen academic subjects commonly taught in the rural high schools' shows the variation of the median for each subject from the median for all classes, and gives the estimated cost of instruction per pupil hour. It is seen that third- and fourth-year English cost approximately one-third more per pupil hour than first-year English in the schools with an

[1] See Table 21, page 44.

TABLE 70.—THE PERCENTAGE OF CLASSES OF DIFFERENT SIZES IN NINETEEN SUBJECTS COMMONLY TAUGHT IN RURAL HIGH SCHOOLS. (A RANDOM SELECTION OF 184 SCHOOLS; 101 SCHOOLS WITH AN ENROLMENT OF 1–49; 45 SCHOOLS WITH AN ENROLMENT OF 50–99; 38 SCHOOLS WITH AN ENROLMENT OF 100 AND ABOVE)

Type of school	1–49 pupils enrolled					50–99 pupils enrolled					100 pupils and over				
Size of Classes	1–5	6–10	11–15	16–20	21 and over	1–5	6–10	11–15	16–20	21 and over	1–5	6–10	11–15	16–20	21 and over
English I	20.0	37.3	24.0	12.0	6.7	..	4.4	13.3	26.7	55.6	..	..	1.3	41.3	57.3
English II	30.5	40.3	20.8	2.8	5.6	..	11.3	25.0	27.3	36.4	..	2.1	4.2	55.3	38.3
English III	38.8	51.2	10.0	..	..	6.7	28.9	35.5	20.0	8.9	..	..	14.7	23.5	61.8
English IV	52.5	44.2	3.3	..	..	20.0	48.9	26.7	2.2	2.2	2.3	13.6	11.4	56.8	15.9
Latin I	13.8	40.4	25.5	13.8	6.4	2.0	6.0	8.0	52.0	32.0	..	1.8	3.6	44.6	50.0
Latin II	35.9	46.9	17.2	..	..	4.5	40.9	22.7	18.2	13.6	..	10.4	8.3	39.6	41.7
Latin III and IV	87.9	12.1	..	..	..	81.1	15.1	3.8	..	..	48.5	33.3	12.1	4.6	1.5
French I	38.2	39.7	17.6	4.4	..	7.5	27.5	32.5	12.5	20.0	2.3	4.7	13.9	41.9	37.2
French II	55.5	33.3	9.3	1.9	..	17.5	42.5	32.5	5.0	2.5	2.8	25.0	30.5	30.6	11.1
French III	70.0	20.0	10.0	..	..	83.3	..	16.7	..	..	54.4	45.6	..	..	..
Elementary Algebra	5.0	30.3	28.3	19.2	17.2	..	5.1	8.5	47.4	39.0	..	..	..	45.4	54.6
Intermediate Algebra	62.8	32.6	2.3	2.3	..	20.6	47.1	23.5	8.8	..	2.8	33.3	19.4	33.3	11.1
Plane Geometry	29.5	43.2	18.9	4.2	4.2	11.4	25.7	25.7	20.0	17.1	2.0	2.0	6.0	54.0	36.0
Solid Geometry	100.0	..	..	..	..	100.0	..	..	..	..	58.8	29.4	11.8	..	..
Physics	49.2	45.9	4.9	..	..	29.4	26.5	29.4	11.8	2.9	34.6	30.8	7.7	26.9	..
Elementary Biology	12.6	27.6	25.3	18.4	16.1	..	..	12.2	32.7	55.1	..	..	1.4	38.0	60.6
Ancient History	19.0	54.0	23.8	1.6	1.6	3.4	10.3	37.9	31.0	17.3	..	5.4	16.2	40.5	37.8
American History	67.1	28.6	4.3	..	..	23.5	47.0	5.9	11.8	11.8	11.8	23.5	41.2	23.5	..

TABLE 71.—THE MEDIAN CLASS IN SIXTEEN ACADEMIC SUBJECTS IN THE DIFFERENT TYPES OF RURAL HIGH SCHOOLS CLASSIFIED ON THE BASIS OF NUMBER OF PUPILS ENROLLED, THE VARIATION FROM THE MEDIAN FOR ALL CLASSES, AND THE ESTIMATED COST OF INSTRUCTION PER PUPIL HOUR. (A RANDOM SELECTION OF 184 SCHOOLS)[1]

Type of school	1–49 pupils			50–99 pupils			100 pupils and above		
	Median class	Variation from school median (6.8)	Estimated cost per pupil hour	Median class	Variation from school median (11.6)	Estimated cost per pupil hour	Median class	Variation from school median (17.2)	Estimated cost per pupil hour
English I	9.2	+2.4	.105	21.2	+9.6	.045	10.1	+1.9	.051
English II	6.9	+0.1	.141	16.9	+5.3	.057	17.7	+0.5	.055
English III and IV	6.3	−0.5	.154	9.9	−1.7	.098	17.2	..	.056
Latin II	7.0	+0.2	.138	11.5	−0.1	.084	17.7	+0.5	.055
Latin III and IV	3.0	−3.8	.323	3.0	−8.6	.323	6.0	−11.2	.161
French III and IV	3.2	−3.6	.303	2.5	−9.1	.388	4.6	−12.6	.210
Elementary Algebra	12.1	+5.3	.080	18.4	+6.8	.052	20.7	+3.5	.047
Intermediate Algebra	3.5	−3.3	.277	8.1	−3.5	.119	13.0	−4.2	.074
Plane Geometry	7.1	+0.3	.136	12.5	+0.9	.077	18.3	+1.1	.053
Biology	12.8	+6.0	.076	21.0	+9.4	.046	19.2	+2.0	.050
Physics	6.0	−0.8	.161	7.7	−3.9	.126	7.5	−9.7	.129
Chemistry	4.0	−2.8	.242	7.5	−4.1	.129	13.0	−4.2	.074
American History	4.0	−2.8	.242	8.3	−3.3	.116	17.5	+0.3	.055
Estimated cost of instruction per pupil hour in the median class for the school	..	..	.142	..	..	.083	..	..	.056

[1] Because of their general similarity as to size of classes certain subjects, as English III and IV, are combined.

enrolment under 50. In schools with 50 to 99 pupils third- and fourth-year English cost over twice as much per pupil hour as first-year English. In schools with an enrolment under 50, Latin III and IV and French III and IV have a per pupil hour cost for instruction more than twice that of the median class for all subjects. In schools with 50 to 99 pupils the cost of instruction per pupil hour in Latin III and IV is almost four times as much as in the median class for schools of that type and in French III and IV it is over four and a half times that of the median class for the school. In schools with a pupil enrolment over 100 the cost of instruction per pupil hour in Latin III and IV is almost three times that of the median class in the school, and in French III and IV it is almost four times that of the median class. The per pupil hour cost of instruction in intermediate algebra in schools with an enrolment under 50 is practically twice that of the median class.

It should not be concluded that subjects taught in the rural high school at a high cost per pupil hour should be eliminated from the program of the school and that the number of subjects offered should be decreased. The great variation in the cost of instruction for different subjects does indicate, however, the need of a careful study of the curricula of the rural high school with a view to discovering a better organization of the program of studies and to determining on the basis of the actual needs of the pupil population the relative values of the subjects offered at present and of subjects that might be offered. As was suggested in the discussion on the organization of the rural high school there are probably possibilities of improving the curricula and programs of studies through the alternation of subjects and through beginning foreign languages every other year. It might be found economical in every way also for certain schools only in groups of neighboring rural high schools to offer certain advanced subjects as French III and IV or chemistry and for the other schools to send pupils desiring that subject to the school offering them. By such coöperation each school would be able to extend its program of studies in the direction of meeting more adequately the needs of the larger number of pupils enrolled.

Contemporary Magazines as a Source of Supplementary Subject Matter.—A phase of high school work increasingly rec-

ognized as important is the development in high school pupils of an interest in contemporary literature and problems of today and the habit of reading newspapers and magazines. This is primarily a curriculum problem. The newspaper and magazine afford valuable sources of supplementary reading particularly in the social and

TABLE 72.—MAGAZINES IN RURAL HIGH SCHOOL LIBRARIES. DATA FROM 403 SCHOOLS AS REPORTED BY THE PRINCIPAL. ONLY MAGAZINES FOUND IN FIVE OR MORE SCHOOLS ARE LISTED

Name of magazine	Size of school					Total	Per-cent
	1–49 pupils less than 4 years work	1–49 pupils	50–99 pupils	100–149 pupils	150 and more pupils		
None	20	46	19	6	4	95	23.6
Literary Digest	26	80	65	23	14	208	51.6
National Geographic	11	36	33	23	8	111	27.5
Independent	7	37	31	15	2	92	22.8
Outlook	3	19	30	18	7	77	19.1
Current Events	12	31	24	6	2	75	18.6
World's Work	3	11	27	13	3	57	14.1
Youth's Companion	6	16	19	10	2	53	13.2
Popular Mechanics	1	18	19	9	4	51	12.7
Review of Reviews	4	12	17	12	3	48	11.9
Popular Science Monthly	1	4	14	7	3	29	7.2
Atlantic Monthly	..	6	7	9	1	23	5.7
American	1	8	7	3	1	20	5.0
St. Nicholas	3	..	10	3	1	17	4.2
Scientific American	1	3	7	1	4	16	4.0
American Boy	1	3	2	3	2	11	2.7
Country Gentlemen	2	1	6	2	..	11	2.7
Harper's Magazine	..	4	3	1	1	9	2.2
Boy's Life	1	2	4	1	..	8	2.0
Current History	..	1	2	1	3	7	1.7
Rural New Yorker	..	..	4	3	..	7	1.7
Ladies' Home Journal	..	3	4	..	..	7	1.7
Scribner's Magazine	1	1	1	2	1	6	1.5
Saturday Evening Post	1	1	2	2	..	6	1.5
Little Folks	1	4	1	..	..	6	1.5
Current Opinion	..	..	..	4	1	5	1.2
Current Topics	1	2	1	1	..	5	1.2
Cornell Countrymen	..	2	2	1	..	5	1.2
A daily Newspaper	4	12	8	5	2	31	7.7

natural sciences and English and offer a vital means of contact between the regular class-room work and life.

The reports of 403 principals of rural high schools show that many of the schools have five or more magazines in the school library and a large proportion have one or more. Almost 24 percent of the schools, however, reported no current magazines in the library and only 8 percent had a daily newspaper. Over half of the schools reporting had the "Literary Digest," approximately one-fourth of them had the "National Geographic Magazine" and 23 percent the "Independent." Other magazines in more than 10 percent of the libraries were the "Outlook," "Current Events," "The World's Work," "The Youth's Companion," "Popular Mechanics" and the "Review of Reviews." Eighteen other magazines were reported by five or more schools each.

The data from this phase of the study indicate that, with the exception of a comparatively small proportion of the rural high schools, too little emphasis is placed upon the reading of current magazines. (See Table 72.)

Section 2.—Some Principles Underlying the Building of the Rural High School Curriculum

Any analysis of the curriculum of a school or type of schools that is to be constructive, to be more than a mere cataloging of facts as to existing conditions, must be based upon principles underlying curriculum building. It must evaluate the elements of the curriculum in the light of the purposes which that curriculum is to serve.

It is assumed that the fundamental aim of the high school is the same whether it is situated in the city or in a rural or village community. In either case its ultimate aim is individual and social efficiency. Because of differences in the experience background of rural high school pupils as contrasted with city high school pupils, it is probable that even for the attainment of objectives common to both types of schools, differences in subject matter will often be advisable. Because of differences in the life purposes of major groups in the pupil population, certain of the objectives of the rural high school may be other than those of the city high school.

The basic principle by which ultimately any unit of the educa-

tional system must be evaluated is its effectiveness in promoting individual and social efficiency with the time and materials it has at its command. The curriculum elements must be suited to the maturity and capacities of its pupils. These principles imply the constant adjustment of the school to the needs and demands of its pupils and of the society by which it is maintained. The school exists for the training of the individuals whom it is designed to serve to meet in the ablest fashion their problems while in school and later in life.

One's success in meeting the various situations that arise depends largely upon his training in relation to life contacts. The principal life contacts of an individual today, as a member of the various social groups, whether in rural or urban communties, seem to be reducible to a comparatively small number of related but fairly distinct types. A partial analysis of these contacts gives a basis for determining the direction which the work of the high school should take if it is to attain its ultimate aim. The setting up of specific objectives and the selection of specific subject-matter elements to be utilized in the attainment of these objectives must ultimately depend upon a detailed analysis of each of the general types of life contacts. For determining the work of the rural high school this analysis must be made with reference to the knowledge, abilities, attitudes and ideals necessary for making these contacts sympathetically, intelligently and effectively. It must also recognize the fact that for individuals of different life aims the specific contacts within the groups will vary.

In general the important groups of life contacts within which the specific contacts of the individual lie are:

1. Health contacts, or contacts necessary:
   (*a*) As a follower of health practices and principles.
   (*b*) As a promoter of family and community health.
2. Economic contacts, or contacts necessary:
   (*a*) As a producer.
   (*b*) As a business man, manager, enterpriser, salesman.
   (*c*) As a consumer.
3. Civic contacts, or contacts necessary:
   (*a*) As a voter.

(*b*) As a participator in the work of civic institutions, voluntary and governmental.

(*c*) As a promoter of civic progress.

4. Social contacts, or contacts necessary:
   (*a*) As a participator in the social life of the community.
   (*b*) As a promoter of desirable phases of social life.
5. Intellectual contacts, or contacts necessary:
   (*a*) As an individual interested in intellectual matters of today.
   (*b*) As a participator in the intellectual life and problems of the community and of society in general.
   (*c*) As a promoter of the intellectual life of the community.
6. Recreational contacts, or contacts necessary:
   (*a*) As an individual interested and trained in desirable ways and means of recreation.
   (*b*) As a participator in desirable forms of recreation.
   (*c*) As a promoter of desirable forms of recreation in the community.
7. Esthetic contacts, or contacts necessary:
   (*a*) As an appreciator of the beautiful.
   (*b*) As an advocate of better opportunities for the enjoyment of the beautiful.
   (*c*) As a promoter of those things which add to the beauty of the community.
8. Religious contacts, or contacts necessary:
   (*a*) As a follower of religious principles.
   (*b*) As a participator in the religious life of the community.
   (*c*) As a promoter of religious life.
9. Moral-ethical contacts, or contacts necessary:
   (*a*) As a follower of moral and ethical standards.
   (*b*) As a promoter of moral and ethical practices and principles.

Every individual today must make in one way or another contacts in at least all the groups given above. The important question for the community and for society in general is his attitude in making them and the ability with which he acts. Both for himself and for the community in which he lives, it is highly desirable that

he should make these contacts sympathetically, intelligently and effectively. To make them in a sympathetic, intelligent, and effective manner requires that he shall be in possession of certain knowledge, shall have formed certain habits of thinking, shall have developed certain abilities, and shall be governed by certain attitudes and ideals with respect to these contacts.

The problem of the rural high school with respect to its objectives and consequently with respect to its program of studies and curriculum content and organization develops directly out of the life contacts needed today. Its solution requires a scientific approach and patient scientific study. Such a study must eventually result in a complete analysis of life contacts, and the discovery of those specific activities for which the school as an institution is responsible and their organization on the basis of their relative values and with regard to the abilities and needs of individuals of high school age reared in village and rural communities.

Such a study will undoubtedly show that many of the abilities, attitudes, ideals, and elements of knowledge needed by the individual have been or should be gained in the elementary school. It will undoubtedly reveal the fact that many are partially or fully gained through social agencies other than the school, and that some are not feasible during the secondary school period. For example, most of the training desirable for religious contacts probably lies beyond the province of the high school, though the inculcation of certain knowledge and the development of certain attitudes and ideals may be found to be a desirable phase of its work. Again the problem of moral and ethical contacts may be found to run transversely through all other life contacts and not to require consideration as a special phase of high school training but rather as a part of all phases. All of these questions can be answered only gradually as the analysis proceeds and as the work of the school is determined with relation to the present-day needs of the individual and of the social groups to which he belongs.

While the nature of the work of the rural high school is a problem, the final solution of which lies in the future, it seems possible in accordance with the partial analysis of life contacts above to set up provisionally at least the main objectives toward the realization of

which the rural high school should strive. Hence the following objectives are suggested as those necessary for the rural high school in working toward its aim: individual and social efficiency. The results of scientific study may alter them and must be depended upon to supply the facts necessary for establishing the specific objectives.

1. To promote in the pupil a normal physical development.

2. To guide each pupil toward the selection of a worthy life work and in planning his high school work in harmony with his choice.

3. To train the pupil not going beyond the high school for intelligent self-support in some worthy type of life work within the limits of his stage of maturity, of his capacities, and of the time span of the rural high school.

4. To promote the development in each pupil of a sense of his responsibility as a member of society and of a democracy (acceptance of, and a feeling of responsibility for, the performance of civic duties).

5. To stimulate and train each pupil so far as age and time permit to participate intelligently in promoting the welfare of society (service).

6. To give each pupil training in some desirable forms of recreation for his leisure time or moments of relaxation.

7. To stimulate each pupil to continue his education after his school life is ended (to promote the development of some permanent appreciations, interests, habits, and desires for continued growth).

8. To train each pupil, in so far as the age of the secondary school pupil makes desirable, to meet intelligently the responsibilities of home life and parenthood.

9. To train each pupil through and in relation to all the work of the school in ethical habits and attitudes.

10. To prepare those pupils who so desire to enter higher institutions of learning.

In developing the studies, sequence of studies and student life of the rural high school to meet the requirements of the objectives suggested, or others to be established, and to give sufficient variation to meet the needs of the groups of pupils for whom the curricula are designed, it is necessary to keep in mind the two great forces in

society. There is the integrating force tending to hold the various social groups together through common knowledge, common attitudes, and common ideals. On the other hand, there is the differentiating force tending to draw groups apart through lack of common knowledge, lack of common attitudes and ideals, and through the competition or antagonisms of local, partisan, and group interests. In a democratic society it is necessary to maintain a balance between these forces.

Upon the secondary school, both because of the maturity and interests of its pupils and because of the large number of pupils coming under its direction, would seem to rest the main responsibility for preserving the balance between these two forces. Every school program should contain subjects of an integrating nature and a high school program must, from the very nature of the objectives of secondary education, contain elements of the differentiating type. Up to the present time the high school, and the rural high school particularly, both because of a limited program and because of the relatively large proportion of required subjects, has worked mainly in the direction of integration. In the main, however, the content of the subjects taken by all pupils has been but indirectly related to the life of today, and hence has probably tended to develop in no vital sense the abilities, attitudes and knowledge elements of genuine integrating values. The program of the rural high school has offered comparatively little in the way of subjects of the differentiating type. If it is to attain its objectives, it must in the future give greater opportunity for differentiation and at the same time select its integrating subjects upon a more vital basis.

As a guide for the further study of the curriculum groups of high school subjects and activities are offered which seem to meet, partially at least, the requirements of the types of life contacts represented in the rural community and the corresponding objectives of the rural high school. The subjects suggested are also grouped as predominantly integrating or differentiating in their nature. These groups are not to be thought of as inclusive, nor is it assumed that the present subject matter content is the best that is available.

I. High school subjects predominantly integrating in character:
   A. English
      1. English and American literature (including current literature in books and magazines).
      2. English language (oral and written expression).
   B. Social Science
      1. American history and modern European history.
      2. Community civics leading to State and national government.
      3. Economics and sociology.
      4. The study of occupations and readings about vocations.
      5. Current events.
   C. Natural Science
      1. General science.
      2. Hygiene, sanitation, etc.
      3. General biology, civic biology, botany.
      4. Physics and chemistry.
   D. Art
      1. Music.
      2. Drawing.
      3. Dramatics.
   E. General School Activities
      (Assemblies, clubs, athletics, and self-government organizations as an integral part of the curriculum).

II. Specializing and differentiating material:
   A. Greater intensity for individual pupils or groups of pupils in the study of selected materials in (I) in accordance with pupil's life purposes and interests or both.
   B. Foreign languages and literatures (when not made a general requirement).
   C. Prevocational materials, such as: various types of shop work, clerical and commercial subjects, agriculture, home economics, etc.
   D. Vocational subjects, such as dairy farming, fruit growing, machine shop, printing, carpentry, etc.
   E. Subjects (definitely selected and organized in relation to the

vocation being prepared for), such as mechanical drawing, the various types of applied mathematics, applied chemistry, applied botany, commercial law, etc.

It may be well at this point to indicate in some detail the integrating values of certain subject groups. For this purpose English and the social sciences are briefly considered.

English is an integrating subject in the high school primarily because it is the vernacular of the nation, its medium of communication and thought. Through his command of the English language the individual has the key to the appreciation and understanding of national life. Through written and oral composition in English classes all phases of school work and of community and national activity may be considered. Through the study and reading of the various types of literature of the past and present a knowledge and appreciation of the customs, traditions, problems and ideals of American life and of English-speaking peoples may be acquired. The experiences of the pupils are widened and the variety of these experiences increased. Intimate contacts with great characters and important events in the history of the country's development are made possible under the guidance of the school. The development of desirable habits of reading and of permanent interests may be stimulated. And finally, through literary and debating clubs, not only is the pupil made acquainted with valuable material but opportunities for the understanding and practice of group action are easily afforded him.

The social sciences are integrating among others, in the following ways: They afford, through the very nature of their content, one of the means for arriving at an understanding of group action. They are the key to the study of the evolution of society and its institutions. They furnish a direct avenue to the knowledge and appreciation of the important social and civic institutions and their functions in society. Through the study of the social sciences should come the understanding of the nature and functions of law, and the relation of the individual to society. They are important means in leading the pupil to an understanding and appreciation of his obligations and responsibilities, social, civic, and moral.

Through their study and through the various activities of the school and of the community in which the high school pupil participates, they should lead to the development of abilities, attitudes and ideals of group action and social service. Through the study of occupations and their characteristics and place in social welfare, the pupil may be given an insight into the interdependence and relationship of the various phases of human endeavor. Through the assigned and voluntary readings and discussions of current problems he may become acquainted with many types of social and civic questions of modern life.

The philosophy of public secondary education in a democracy demands that the public high school should serve the needs of all persons of secondary school age who have completed the work of the elementary school. It should organize and direct its work toward developing individuals efficient in the activities of the life of today. It should organize its curricula to the end of giving the secondary school pupil the knowledge, habits, abilities, attitudes and ideals most effective in making the life contacts of today. It should not set up standards of scholarship, nor require of all pupils the study of subjects designed to meet the needs of only a minority or encouraging the elimination of large numbers of individuals who might be helped by all or a part of secondary education. Equal educational opportunities in secondary education are not given by requiring from all pupils a mastery of the same subjects. The content of high school curricula and the standards of achievement set up should be determined with direct reference to the maturity, abilities, and life purposes of the secondary school pupil, and to the existing social needs.

Every year of high school work should be determined primarily with reference to its values as an educational unit. The academic work of the rural high school should in the main be liberalizing in the true sense of the word and particularly so in the first two years. Less than half its pupils ever reach the third year. This fact indicates that if the rural high school is to give the most effective kind of education for all concerned, the first two years of the curriculum should be made up largely of subjects of significant value in making the life contacts of today. The work should be as broad

and flexible as the resources of the school will permit. As a means it should afford as many opportunities as possible for the acquirement of knowledge, habits, abilities, attitudes and ideals of immediate value. Thus it would be genuinely liberalizing in its training.

At the present time the subjects offered and required, particularly in the first two years, are subjects possessing little value to the pupil who does not complete a high school course and probably little of value also to the pupil who finishes high school but does not go to college. In general it seems that the rural high school would more nearly meet the objectives of secondary education if its curricula were organized with the strictly college preparatory subjects coming mainly in the last two years of the course. This would make it possible to introduce into the early years of the school subjects having direct bearing upon the contacts of modern life.

An organization of curricula for rural high schools extending over a period of six years on a two cycle plan in which the work of the first three years would be determined in the light of pupil and community needs without reference to college preparation would be highly desirable. This would make possible in the first three years the emphasis of objectives largely neglected in the rural high school at present, especially in the discovery of the pupil's interests and abilities and in guiding him in the making of his plans for the future. Through increased emphasis upon phases of social and natural science and other subjects of large content values, and less emphasis upon abstract mathematics and foreign language, the needs of the larger proportion of pupils would probably be more directly met than at present.

From the standpoint of organization the curriculum should gradually become differentiated into two or more fairly distinct curricula in the last three-year cycle. Or under the regular four-year type of school in the second year. Each of these curricula should be built about a special core of subjects designed to meet directly the needs of major groups of pupils. In addition each curriculum should contain certain subjects closely related to the core; certain subjects, as English and the social sciences, regarded

as necessary by society in all secondary school curricula; and certain subjects of worthwhile content values affording a margin of free electives, as literature, art, and music.

Generally speaking, all rural high schools should strive toward the attainment of all objectives of secondary education. The size of the school, the limitations as to teaching force and equipment, however, may make the attainment of certain objectives uneconomical for every school. Further study of the rural high school should be made as to the possibility and advisability of groups of neighboring high schools coöperating for the purpose of increasing their curriculum offerings as a group. It might be economical for only one school in a group to offer a certain academic subject or a vocational curriculum desired by only a small number of pupils in each school, and for the other schools to send their pupils desiring such work to this school. If certain schools should offer special lines of work not given by other neighboring schools, greater educational opportunities would be afforded all high school pupils attending any one of the schools.

In the rural high school it would seem desirable that an advanced course in American history should be offered at least as early as the third year of the course. Restricting it to the fourth year means that only a small proportion of the pupils study American history in high school. While some of the problems of economics and sociology can be touched upon in the study of civics, which is usually taught in the first or second year, there is needed in the rural high school a course in the phases of economics and sociology most closely related to the more common life contacts. Because of the narrowness of the rural high school pupil's contacts with occupations it is especially desirable that he have an opportunity to broaden and deepen his knowledge of occupational opportunities.

Section 3.—General Summary, with Suggestions for the Improvement of the Curriculum of the Rural High School

The study of the curriculum of the rural high school from various angles and the observation of high school teaching tend to emphasize a small number of outstanding characteristics as to its nature and content.

1. The work of the rural high school is restricted in the main to the older, more formal subjects of study. The content of its curriculum and the standards set up are still based largely upon preparation for college.

2. The aims and objectives for the program of studies as a whole and for the separate subjects are vague and remote, except that the passing of the Regents examinations is an end prominent in the teaching of every academic subject in the rural high schools.

3. The instruction in the subjects offered is formal and bookish, being unduly limited to a single text-book for each course.

4. There is a strong tendency toward a slavish following of the State syllabi resulting in an undue uniformity of subject matter with a consequent neglect of possible local adaptations, this condition being aggravated by a system of uniform State examinations.

5. There is too much attention given to preparation for examinations resulting in general in overemphasis of mechanical memorizing and underemphasis of the more vital elements of genuine intellectual development.

6. In general there is a lack of recognition of the educational values of extra-class-room activities.

7. Finally, as indicated by the percentage of failures in all academic subjects in the rural high school, neither the subject matter nor the standards of achievement seem to be suited to the maturity, abilities, and interests of rural high school pupils.

Recommendations

In accordance with the preceding discussion and upon the basis of the results of the study of rural high school instruction and of the curricula from various angles, the following suggestions and recommendations are made:

Aims and Objectives.—One of the first needs of rural secondary education is a clear understanding as to desirable aims and objectives. This can come only as a result of a careful study of the life contacts which the pupil in the rural high school will need to make and those which he has already made. As a step in this direction it is recommended:

1. That there be formed a committee[1] acting in coöperation with the appropriate official in the State Department of Education and fitted to undertake the task by reason of their interest in and acquaintance with the problems of rural secondary education, to work toward the establishment of suitable objectives and reasonable standards for the rural high school. This committee should also devote attention to the development of suggested curricula for rural high schools based upon the objectives set up as a result of a thorough study of the requirements of present-day living, particularly in rural and village communities. It should further seek, directly or through subcommittees acting under its direction, to discover and establish specific objectives for the various subjects of study and to suggest an effective organization and arrangement of these subjects of study into curricula suited to meet the capacities, needs, and demands of the various groups of pupils in the rural high schools of the State. It is further suggested that the committee should at all times make use of the great body of men and women engaged in the actual work of administration, supervision, and instruction in rural secondary education in the local high schools and in the intermediate school units, and of country life organizations, thus operating to stimulate a State-wide study of rural high school problems.

To insure the existence of an effective type of rural secondary education at all times in the future, plans should be formulated to promote in the State a continuous scientific study of the rural high school and its needs. These plans should be such as to enlist the services of the administrative, supervisory, and teaching forces of the rural high schools of the State and other agencies concerned with the problems of rural life.

2. To facilitate and encourage the adaptation of the work of rural high schools to the needs of the community or region in which they are situated it is recommended that the State requirements in the matter of required subjects and in the subject matter of courses of study be limited to the minimum essentials necessary for the realiza-

[1] This general committee may be, if deemed desirable, the same as recommended for the study of the problems covering the administration and organization of the rural high school.

tion of the educational objectives vital to State and national citizenship and health.

3. It is recommended that all subjects of high school grade and taught by a qualified instructor be given equal recognition toward a diploma recognized by the State, provided (a) that the pupil meet the State requirements as indicated in the preceding recommendation, and provided (b) that there has been continuity in the curriculum pursued by the pupil.

4. It is recommended that State syllabi in the various secondary school subjects be prepared with attention given to the peculiar needs of the small high school as recommended by the committee referred to above, and that they be revised at least every five years in the light of the advancements made in the interim in the establishment of objectives for the particular subject, in subject matter content and in methods of presentation. It is further recommended:

(*a*) That these syllabi should offer a broad outline of the possible content of the subject based upon the most recent developments in secondary education, should be designed to suggest and guide in the formulation of a course of study rather than to serve as a course of study themselves.

(*b*) That in syllabi in which portions of the content are required in accordance with (2) there shall be specifically indicated the objectives to be met and suggested units of subject matter for the attainment of these objectives, the remaining portions of the outline to be of the nature indicated in (*a*).

(*c*) That a prominent feature of the syllabi should be a clear statement of accepted principles underlying the selection and organization of subject matter, and the most approved methods of presentation in each subject. Selected references should be indicated for the guidance of the teacher in his further study of the pedagogical problems of the subject.

(*d*) That the syllabi should contain suggestive lists of supplementary readings, sources, and educational materials suitable for pupils of high school age.

5. It is recommended that objectives, curricula, and syllabi for junior high schools in rural communities be developed by the State. In general these should observe the principles suggested for the

development of objectives, curricula, and syllabi for the regular high school. They should be suited to the needs and maturity of rural pupils of 12 to 15 years of age.

6. It is recommended that the development of the courses of study in each high school subject (both on the basis of the junior-senior high school plan of organization and for the four-year high school) for the rural high schools of a particular section of the State be made (so soon as the intermediate unit shall have been developed) one of the responsibilities of the authorities in charge of the high schools of the intermediate administrative unit in which the high school is located. This will make for courses of study better suited to the rural high schools than those in operation under the present practice of the State.

7. The following recommendations are made with regard to the offering of particular subjects in the rural high schools:

(*a*) Undoubtedly the social science group is one of the most genuinely liberalizing groups of studies in the secondary school. It furnishes the most direct means for teaching citizenship. The present requirements for the rural high schools are, from the standpoint of time given, sufficient. For meeting the needs of today, and particularly of those pupils who do not continue their education beyond the rural high school, a reorganization of the work in the social sciences seems desirable.

(*b*) It is recommended that the study of American history be offered to pupils of the rural high school at least as early as the third year. It is further recommended that steps be taken to encourage in the rural high schools the teaching of community civics, economics, and sociology, and that the development of courses of study in these subjects suited to the needs and experience of rural high school boys and girls be encouraged and guided.

(*c*) It is recommended that there be developed for the rural high school a course in the study of occupations. It is believed that such a course would have significant values in teaching citizenship. It should also serve directly as a means of acquainting pupils with the opportunities for vocational service, and serve as a basis for guidance in the intelligent choice of a vocation.

(*d*) Efficient homemaking is of basic importance in promoting

the welfare of the home and of good citizenship. The great majority of the girls enrolled in the rural high schools will ultimately become homemakers. In 1919–20 only 11 percent of the rural high schools of New York offered opportunities for training in homemaking. The establishing of courses in homemaking in every rural high school is recommended. Such courses should be enriched and broadened so as to meet in the fullest possible manner the home and community needs. Credit should be given on the same basis as for academic subjects. Emphasis should be given to the problem of getting colleges to accept for entrance the work in homemaking subjects.

(*e*) One of the outstanding needs in the development of rural secondary education is the opportunity for vocational training in agriculture. At present less than ten percent of the rural high schools offer courses in vocational agriculture. It is recommended, therefore, that courses in vocational agriculture be encouraged in every rural high school of the State where a sufficient number of pupils are interested in the work.

(*f*) It is recommended that the beginning science in rural high schools, and especially where there is the junior high school organization, be a broad introduction to science designed to give the pupil contact with the many phases of science as it affects his daily life rather than a detailed acquaintance with a special field of scientific knowledge highly organized. General science seems best adapted to meet these demands. For the rural high schools of New York, however, it should be developed with definite regard to the experience background of the rural high school pupil of New York and with flexibility permitting adaptation to conditions peculiar to particular localities.

(*g*) It is recommended that less emphasis be given to the study of foreign languages in the rural high schools, and that all work in foreign languages, both ancient and modern, be elective.

(*h*) It is recommended that intermediate algebra, advanced algebra, and trigonometry, particularly the last two, be discouraged in the rural high school, and that for pupils not preparing for college not more than one year of mathematics be required.

(*i*) It is recommended that the curriculum of the rural high school be organized in the first two years with the view to meeting

most effectively the needs and interests of all pupils and that subjects specifically required for college entrance be offered in the last two years of high school.

8. It is recommended that a careful study be made as to the educational values of extra-class-room activities and as to the best methods for realizing these values in a rural high school and that steps be taken to make principals and teachers acquainted with the results of this study in the way of suggestions as to the nature, aims, organization and control of such activities.

9. It is recommended that more definite guidance be given rural high school principals in the organization of their daily programs: with the purpose (1) of increasing the range of subjects offered in the high school; (2) of meeting more directly community needs, and (3) at the same time with a view to reducing the teaching load for teachers. It would seem that these ends may be attained through such means as a better selection of subjects, by decreasing the proportion of extremely small classes in subjects appealing to but a few pupils, and by alternation of classes in such subjects as English, history, third and fourth year language and science and by beginning specific languages in alternate years.

It is suggested that the State department can be of inestimable service to the high schools of the State by encouraging the sending to it by local principals, teachers and supervisors of ways and means which they have used successfully in meeting their problems of the daily program, curriculum organization, subject matter content, and methods of teaching. These suggestions should then be returned to the rural high school principals and teachers throughout the State. It would seem also that the department might perform a valuable service to the rural high schools of the State by directing in selected schools experimental work concerning problems of organization, curriculum content and arrangement, and teaching methods.

In conclusion it would seem that the problem of the rural high school in New York is to develop a type of secondary education suited to the needs, abilities, and life purposes of rural high school pupils. Its dominant aim should be the development of individually and socially efficient persons within the limits of the secondary

school and of the maturity of pupils of high school age. Its work should be determined in the light of the possibilities and responsibilities of the public secondary school as an institution, rather than as an institution, the work of which is primarily preparatory for higher education.

SURVEY OF NEW YORK STATE RURAL SCHOOLS

THE survey was organized with the following sections and directors:

Administration and Supervision. C. H. Judd.
School Support. Harlan Updegraff.
Teachers and Courses of Study. W. C. Bagley.
School Buildings. J. E. Butterworth.
Measuring the Work of the Schools. M. E. Haggerty.
Community Relations. Mabel Carney.

The results of the studies conducted by these directors and their associates have been embodied in a series of reports. The approximate dates at which these will be available for distribution are:

Volume I. **Rural School Survey of New York State.** (Preliminary Report) May, 1922.

Volume II. **Administration and Supervision,** October, 1922.
The District System. Shelby.
The Supervisory District. Brooks.
The Community Unit. Works.
Principles of Administration. Bobbitt.
The State System of Examinations. Kruse.
Health Education. Peterson.
The State Schools of Agriculture. Holton.
Junior Extension. Holton.
Summary and Recommendations. Judd.

Volume III. **School Support.** Updegraff. August, 1922.

Volume IV. **Teachers and Teacher Preparation.** Bagley. September, 1922.
Elementary School Curriculum. Brim.
Community Relations. Carney.

Volume V. **School Buildings.** Butterworth. June, 1922.

Volume VI. **The Educational Product.** Haggerty. July, 1922.

Volume VII. **The Rural High Schools.** Ferriss. August, 1922.
(The administrative features of the high school were studied in coöperation with Dr. Judd, while teachers and curricula were developed under the general direction of Dr. Bagley.)

Volume VIII. **Vocational Education.** Eaton. July, 1922.
(Prepared under the direction of Dr. Bagley.)

These volumes may be obtained at seventy-five cents each, postpaid, except Volume II, on Administration and Supervision, which will be one dollar. Only a limited edition will be printed and those wishing to make certain of securing copies may place their orders at any time.

Joint Committee on Rural Schools,
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